THE NEW HAVEN RAILROAD

BOOK OF RULES

THE NEW YORK, NEW HAVEN AND HARTFORD RAILROAD COMPANY

RULES

FOR THE

GOVERNMENT OF THE

OPERATING DEPARTMENT

The rules herein set forth govern the railroads operated by The New York, New Haven & Hartford Railroad Company.

They take effect October 28, 1956, superseding all previous rules and instructions inconsistent therewith. Special instructions may be issued by proper authority.

General Manager

No. 18086

This book is the property of the Company
and is loaned to

Name	Employed as

who in accepting agrees to return it to the proper officer when called for, or forfeit $1.00.

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GENERAL NOTICE.

Safety is of the first importance in the discharge of duty.

Obedience to the rules is essential to safety.

To enter or remain in the service is an assurance of willingness to obey the rules.

The service demands the faithful, intelligent and courteous discharge of duty.

To obtain promotion, ability must be shown for greater responsibility.

GENERAL RULES.

A. Employes whose duties are prescribed by these rules must provide themselves with a copy.

Employes whose duties are in any way affected by the time-table must have a copy of the current time-table with them while on duty.

B. Employes must be conversant with and obey the rules and special instructions. If in doubt as to their meaning they must apply to proper authority for an explanation.

C. Employes must pass the required examinations.

D. Persons employed in any service on trains are subject to the rules and special instructions.

E. Employes must render every assistance in their power in carrying out the rules and special instructions, and must report promptly to the proper official any violation thereof, misconduct or negligence affecting the interest of the Company.

F. Accidents, failure in the supply of water, fuel or electric power, defects in tracks, roadbed, bridges, signals, highway crossing protective devices, catenary and transmission lines or any unusual conditions which may affect the movement of trains or engines, must be promptly protected and reported by quickest available means of communication to the proper authority.

G. The use of intoxicants or narcotics by employes subject to duty, or their possession or use while on duty, is prohibited.

H. The use of tobacco by employes on duty in or about passenger stations, or on passenger cars; and smoking in freight houses, cars containing freight and on docks and piers is prohibited.

Postal Transportation Service rules prohibit smoking in storage cars. No person shall smoke or carry lighted cigars, cigarettes or pipes in mail storage cars while same are being loaded, unloaded or while in transit.

J. Employes on duty must wear the prescribed badge and uniform and be neat in appearance.

K. To avoid annoyance to the public, employes and others authorized to transact business at stations and on or about trains, must be courteous, orderly and quiet.

L. Employes must use care and economy in the use of railroad property, and when leaving the service, or upon demand by proper authority, must return property entrusted to their care. In case of danger to the Company's property employes must unite to protect it.

M. Employes must exercise care to avoid injury to themselves or others. They must observe the condition of equipment and tools which they use in performing their duties, and when found defective will, if practicable, put them in safe condition, reporting defects to the proper authority.

They must inform themselves as to the location of structures or obstructions where clearances are close.

They must expect movement of trains, engines or cars at any time, on any track, in either direction.

Boarding or riding the leading footboard or pilot step of a moving engine is prohibited. In the event any person positions himself on an engine in violation of this rule, engineman will be expected to stop the movement and remain stationary until the violator has alighted from his location.

Boarding or riding on the trailing footboard of an engine hauling cars is prohibited except when necessary because of insufficient clearances.

Constant presence of mind to insure safety to themselves and to others is the primary duty of all employes.

N. Employes who are careless of the safety of themselves or of others; also those who are insubordinate, dishonest, immoral, quarrelsome or otherwise vicious, or who conduct themselves in such a manner, or handle their personal obligations in such a way that their railroad will be subjected to criticism and loss of goodwill, will not be retained in the service.

Employes who are charged with the duty of preparing time returns and time books must show correct information thereon.

O. Employes are prohibited when on duty from reading newspapers, books or periodicals, engaging in games or unnecessary conversation, sleeping, using unauthorized radio or television sets on Company property or in other manner having their attention diverted from their duties. Gambling in any form is forbidden on Company property.

Employes must devote themselves exclusively to the Company's service during prescribed hours, reside wherever required and obey instructions from the proper authority. They must not absent themselves from duty, exchange duties with, or substitute others in their place, nor engage in other business which interferes with the proper performance of his duties as an employe or which is detrimental to or in competition with the Company.

P. Civil, gentlemanly deportment is required of all employes in their dealings with the public, their superiors, their subordinates and each other. Boisterous, profane or vulgar language is forbidden. Courtesy and attention to patrons is demanded. Employes must not enter into altercation with any person, no matter what provocation may be given, but will make note of the facts and report to their immediate superiors.

Employes traveling on free transportation must be orderly, and whenever necessary, promptly surrender their seats to revenue passengers.

When passenger service is disarranged, the public shall be informed of the probable length of the interruption; and, when ascertained, the time at which the service will be restored.

Notice of such interruptions must be posted conspicuously at stations. Announcement must also be made in waiting rooms, on platforms, and to passengers when they purchase tickets. Conductors of delayed trains must also inform passengers.

Q. Employes are under the authority of the officers and subordinate supervisors of the division on which they are performing service.

R. Applicants for re-employment or re-instatement must undergo the same examinations as applicants for employment, unless otherwise directed.

A person dismissed from one department of the service shall not be employed in the same or another department without the consent of the head of the department from which dismissed and approval of the General Manager.

S. Unless authorized, assignment of wages is prohibited, and shall be cause for dismissal. Employes whose wages have been garnisheed shall, unless satisfactory reasons be given, be dismissed from the service.

Unless authorized, employes must not use the Company's credit, and must not receive or pay out money on the Company's account. Property of the Company must not be sold or in any way disposed of except by proper authority.

T. When an employe is served with a subpoena, summons or other legal process in which this Company is, or may be, interested, requiring such employe to report to any court or officer, he shall at once notify the head of the department in which employed, and be governed by instructions received.

Employes are forbidden to give any statements or information, either verbal or written, to attorneys or others about accidents or other matters pertaining thereto, excepting to attorneys or representatives of this Company.

This rule shall not prohibit the furnishing of information to a person in interest as to the facts

incident to the injury, or death of any employe; provided, however, that information contained in the files of the Company or other privileged or confidential reports must not be divulged.

Employes entrusted with the books, waybills or the statistics of the Company must not, under any circumstances, permit unauthorized persons to have access thereto, or verbally or otherwise divulge any of the Company's affairs.

U. The acceptance of gratuities or rewards from passengers or other patrons of the Company is forbidden.

V. Employes must keep the premises subject to their control in a neat and clean condition. Fire apparatus must be kept in good order and ready for immediate use.

Y. Employes observing broken or damaged poles or wires must report the condition as soon as practicable to the proper authority, giving the location as nearly as possible. If dangerous and liable to cause accident or personal injury, a flagman will be left to protect same.

Z. The several Federal and State Hours of Service Laws for employes connected with train operation contemplate that employes in this service shall have ample rest and be physically and mentally fit for the proper performance of their duties. Such employes are prohibited from using their time while off duty in a manner that may unfit them for the safe, prompt and efficient performance of their respective duties. They must use their time off duty primarily for obtaining ample and proper rest.

DEFINITIONS.

BLOCK.

BLOCK.—A length of track of defined limits, the use of which by trains and engines is governed by block signals, cab signals or both.

BLOCK SIGNAL SYSTEMS.

AUTOMATIC BLOCK SIGNAL SYSTEM.—A series of consecutive blocks governed by block signals, cab signals, or both, actuated by a train, or engine, or by certain conditions affecting the use of a block.

MANUAL BLOCK SIGNAL SYSTEM.—A block or a series of consecutive blocks, governed by block signals operated manually, upon information by telephone or other means of communication.

TRAFFIC CONTROL SYSTEM.—A block signal system under which movements are authorized by block signals whose indications supersede the superiority of trains for both opposing and following movements on the same track.

CENTRALIZED TRAFFIC CONTROL.—A system of operation by means of which the movements over routes and through blocks on a designated section of track, or tracks, is directed by signals controlled from a designated point, superseding superiority of trains, and without requiring the use of train orders.

DIVISION.

DIVISION.—That portion of a railroad assigned to the supervision of a superintendent.

ENGINE.

ENGINE.—A unit propelled by any form of energy, or a combination of such units operated from a single control, used in train or yard service.

YARD ENGINE.—An engine assigned to yard service.

INTERLOCKING.

INTERLOCKING.—An arrangement of signals and signal appliances so interconnected that their movements must succeed each other in proper sequence and for which interlocking rules are in effect. It may be operated manually or automatically.

INTERLOCKING LIMITS.—The tracks between the opposing home signals of an interlocking.

PILOT.

PILOT.—An employe assigned to a train when the engineman or conductor, or both, are not fully acquainted with the physical characteristics or rules of the railroad, or portion of the railroad, over which the train is to be moved.

SIGNALS.

APPROACH SIGNAL.—A fixed signal used in connection with one or more signals to govern the approach thereto.

SIGNAL ASPECT.—The appearance of a fixed signal conveying an indication as viewed from the direction of an approaching train or engine; the appearance of a cab signal conveying an indication as viewed by an observer in the cab.

NOTE. — In the illustrations of signal aspects,
R = Red
Y = Yellow
G = Green

CAB SIGNAL.—A signal located in engineman's compartment or cab, indicating a condition affecting the movement of a train or engine and used in conjunction with interlocking signals and in conjunction with or in lieu of block signals.

BLOCK SIGNAL.—A fixed signal at the entrance of a block to govern trains and engines entering and using that block.

FIXED SIGNAL.—A signal of fixed location indicating a condition affecting the movement of a train or engine.

NOTE TO DEFINITION OF FIXED SIGNAL. — The definition of a "Fixed Signal" covers such signals as switch, train order, block, interlocking, semaphore, color light type, stop signs, yard limit signs, slow signs or other means for displaying indications that govern the movement of a train or engine.

HOME SIGNAL.—A fixed signal at the entrance of a route or block to govern trains or engines entering and using that route or block.

DWARF SIGNAL.—A low home signal.

POT SIGNAL.—A small revolving signal used as a substitute for a dwarf signal, or to indicate the position of derail or switch.

SIGNAL INDICATION.—The information conveyed by the aspect of a signal.

INTERLOCKING SIGNALS.—The fixed signals of an interlocking.

SPEEDS.

MEDIUM SPEED.—A speed not exceeding 30 miles per hour.

REDUCED SPEED.—Proceed prepared to stop short of train or obstruction.

RESTRICTED SPEED.—Proceed prepared to stop short of train, engine, obstruction or switch not properly lined and to look out for broken rail, not exceeding 15 miles per hour.

SLOW SPEED.—A speed not exceeding 15 miles per hour.

YARD SPEED.—A speed that will permit stopping within one-half the range of vision.

STATIONS.

BLOCK STATION.—A place from which block signals are operated.

CONTROL STATION.—A place from which centralized traffic control or remote control signal appliances are operated.

INTERLOCKING STATION.—A place from which an interlocking is operated.

REMOTE CONTROL.—A method of operating outlying signal or switch appliances from a designated point.

STATION.—A place designated on the time-table by name.

NOTE TO DEFINITION OF STATION. — When two station names are shown, the name in parentheses is for public use; the other for train and car movements.

TIME-TABLE.

TIME-TABLE.—The authority for the movement of regular trains subject to the rules. It contains classified schedules with special instructions relating to the movement of trains or engines.

SCHEDULE.—That part of a time-table which prescribes direction, number and movement for a regular train.

TRACKS.

MAIN TRACK.—A track extending through yards and between stations, upon which trains are operated by time-table or train order, or both, or the use of which is governed by block signals.

DUAL CONTROL SWITCH.—A power-operated switch which is also equipped for hand-thrown operation.

SPRING SWITCH.—A switch equipped with a spring mechanism arranged to restore the switch points to normal position after having been trailed through.

AUTOMATIC SAFETY SWITCH. — A hand-operated switch and stand that allows a movement from either track to trail through switch. The movement will automatically operate the switch as they pass through it, setting both switch and stand for the route used.

SIDING.—A track auxiliary to the main track for meeting or passing trains.

SINGLE TRACK.—A main track upon which trains are operated in both directions.

TWO OR MORE TRACKS.—Two or more main tracks, upon any of which the current of traffic may be in either specified direction.

CURRENT OF TRAFFIC.—The movement of trains or engines on a main track, in one direction, specified by the rules.

YARD.—A system of tracks within defined limits provided for the making up of trains, storing of cars and other purposes, over which movements not authorized by time-table, or by train order, may be made, subject to prescribed signals and rules, or special instructions.

TRAINS.

TRAIN.—An engine or more than one engine coupled, with or without cars, displaying markers.

EQUIPPED ENGINE OR TRAIN.—An engine or train equipped with cab signal apparatus including warning whistle and acknowledger in operative condition for the direction it is to move.

EXTRA TRAIN.—A train not authorized by a time-table schedule. It may be designated as —

EXTRA—For any extra train except work extra.

WORK EXTRA—For work extra.

REGULAR TRAIN.—A train authorized by a time-table schedule. Regular Trains are first class.

SECTION.—One of two or more trains running on the same schedule displaying signals or for which signals are displayed.

SUPERIOR TRAIN.—A train having precedence over another train.

TRAIN OF SUPERIOR RIGHT.—A train given precedence by train order.

TRAIN OF SUPERIOR CLASS.—A train given precedence by time-table.

TRAIN REGISTER.—A book or form which may be used at designated stations for registering signals displayed, time of arrival and departure of trains and such other information as may be prescribed.

OPERATING RULES.

STANDARD TIME.

1. Eastern standard time obtained from Washington, D. C. observatory will be transmitted to all points from designated offices at 12.00 noon daily.

2. Trainmasters, assistant trainmasters, chief and assistant chief train dispatchers, train dispatchers, stationmasters, yardmasters, road and yard conductors, ticket collectors, train baggagemen, flagmen, trainmen, road foremen of engines, enginemen, firemen, track supervisors, gang foremen, motor hand car operators, supervisors of bridges and buildings, bridge and building foremen, signal supervisors, signal foremen and such other employes as may be designated, must carry, while on duty, a reliable railroad grade watch, for which there must be a prescribed certificate on file with the railroad.

3. Watches of conductors and enginemen must be compared when commencing each day's work, with a clock designated by time-table as a standard clock. The time when watches are compared must be registered on prescribed form.

Conductors and enginemen not having access to a standard clock must compare watches with a conductor or an engineman who has standard time and has registered or must obtain time from the train dispatcher.

Other train employes must compare watches with the conductor or engineman as soon as practicable.

4. Each time-table, from the moment it takes effect, supersedes the preceding time-table. A train of the preceding time-table thereupon loses both right and schedule and can thereafter proceed only as authorized by train order.

Schedules of the new time-table take effect on any division, at the leaving time at their initial station on such division.

Schedules on each division date from their initial station on such division.

Not more than one schedule of the same number and day shall be in effect on any division.

NOTE TO RULE 4. — When schedules originate or terminate on other railroads at stations shown in italics, such stations will be the initial or terminating stations for such schedules.

Where inter-division limits are located between stations the time-table will designate the initial station for inter-division schedules.

5. Not more than two times are given for a train at any station; where one is given, it is, except at terminating stations, or as otherwise indicated, the leaving time; where two, they are the arriving and the leaving time.

The time applies to the place where traffic is received or discharged; where there is no place where traffic is received or discharged, it applies at the switch where an opposing train clears; where there is neither place where traffic is received or discharged nor switch where an opposing train clears, it applies to the place from which fixed signals are operated.

Schedule meeting or passing stations are indicated by figures in full-faced type with the numbers of the trains to be met or passed in small figures adjoining or by a reference letter.

When trains are to be met or passed at a siding extending between two adjoining stations, the time at each end of the siding will be shown in full-faced type.

NOTE TO RULE 5. — At stations shown in italics schedule time is for convenience only.

5a. At single track junctions, ends of single track and at single track initial and terminal stations, when the times of opposing schedules are within 5 minutes of each other they will appear in full-faced type.

6. The following letters when placed before the figures of the schedule indicate:

A — Arrive.

b — No baggage.

c — Stop to leave passengers.

e — Stop to take passengers.

f — Flag stop to receive or discharge traffic.

g — Stop Sundays.

h — Stop Saturdays.

s — Regular stop.

ǂ — Catch or throw U. S. mail.

The following letters on the time-table indicate:

D — Communicating office open as specified by special instructions.

N — Communicating office open continuously.

S.S. — Interlocking station.

The time-table may provide additional letters or characters to indicate specific instructions.

SIGNALS.

7. Employes whose duties may require them to give signals, must provide themselves with the proper appliances, keep them in good order and ready for immediate use.

8. Flags of the prescribed color must be used by day, and lights of the prescribed color and type by night.

8a. Unless otherwise provided, electric lanterns may be used for displaying white lights only.

9. Day signals must be displayed from sunrise to sunset, but when day signals cannot be plainly seen, night signals must be used in addition.

Night signals must be displayed from sunset to sunrise.

10. COLOR SIGNALS.

COLOR.	INDICATION.
(*a*) Red.	Stop.
(*b*) Yellow.	For uses as prescribed by the rules.
(*c*) Green.	Proceed, and for other uses prescribed by the rules.
(*d*) Blue.	See Rule 26.
(*e*) Lunar white.	Yard switch set for lead and for other uses prescribed by the rules.

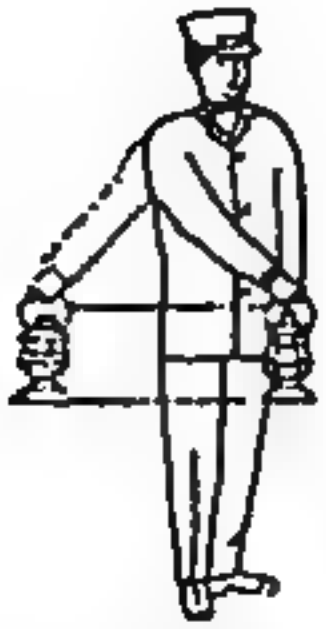
11. A train or engine finding a fusee burning on or near its track must stop. After stopping, the train or engine may proceed at reduced speed.

11a. Lighted fusees must not be placed on public crossings at grade or where fire can be communicated to equipment or structures.

12. HAND, FLAG AND LAMP SIGNALS.

NOTE. — The hand, or a flag, moved the same as the lamp, as illustrated in the following diagrams, gives the same indication, except in the observance of Rule 12a the hand or flag movement may be above the shoulder.

12a.

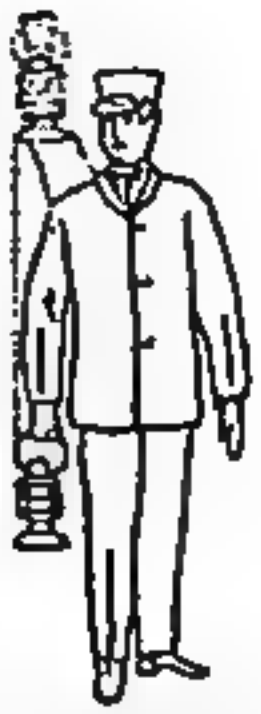


STOP.
Swung at right angle to the track.

12b.

REDUCE SPEED.
Held horizontally at arm's length.

12c.



PROCEED.
Raised and lowered vertically.

12d.

BACK.
Swung vertically in a circle at right angle to the track.

12f.

APPLY AIR BRAKES.
Swung horizontally above the head, when standing.

12g.

RELEASE AIR BRAKES.
Held at arm's length above the head, when standing.

12h. Any object waved violently by anyone on or near the track is a signal to stop.

12i. Signals must be given from a point where they may be plainly seen and in such a way that they cannot be misunderstood. If there is doubt as to the meaning of a signal, or for whom it is intended, it must be regarded as a stop signal.

14. ENGINE WHISTLE SIGNALS.

NOTE. — The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds. The sound of the whistle should be distinct, with intensity and duration proportionate to the distance signal is to be conveyed.

The engine whistle signal may be sounded by whistle or horn actuated by any medium.

SOUND.	INDICATION.
(*a*) o	Apply brakes. Stop.
(*b*) — —	Release brakes. Proceed.
(*c*) — o o o	Flagman protect rear of train.
(*d*) — — — —	Flagman may return from west or south*.
(*e*) — — — — —	Flagman may return from east or north*.
(*g*) o o	Answer to 14 (*k*) or any signal not otherwise provided for.
(*h*) o o o	When standing, back. Answer to 12 (*d*) and 16 (*c*). When running answer to 16 (*d*).
(*j*) o o o o	Call for signals.
(*k*) — o o	To call the attention of engine and train crews of regular and extra trains, yard engines and operators at interlocking stations to signals displayed for a following section. On single track,

*As prescribed by Rule 99.

SOUND.	INDICATION.
	except in CTC territory, if not acknowledged by engineman of the train or engine met or passed, the engineman of the train displaying signals must stop and ascertain the cause.
(*l*) — — o —	Approaching public crossings at grade. To be prolonged or repeated until crossing is reached.
(*m*) ———	Approaching mail cranes where catcher service is performed.
(*n*) — — o	Approaching meeting or waiting points. See Rule 90.
(*o*) o —	Inspect train line for leak, brakes sticking and for dragging equipment.
(*p*) Succession of short sounds.	Alarm for persons or live stock on the track.
(*q*) — o	When running against the current of traffic: (1) Approaching curves or other points where view may be obscured. (2) Approaching trains. (3) On two tracks approaching stations.

SOUND.	INDICATION.
(*s*) o o o o	On freight and passenger trains, when stopped, to call conductor forward. On trains of MU equipment, to call trainman, except flagman forward. On freight engines to call head trainman forward.
(*t*) — o — o	Passing open communicating office call for relief engine.
(*u*) — o o o repeated	Fire alarm.

On two or more tracks, the following whistle signals will be used:

SOUND.	INDICATION.
(*aa*) — — — — —	Flagman for track No. 1 may return from the east or north*.
(*ab*) o — — — — —	Flagman for track No. 1 may return from the west or south*.
(*ac*) — — — —	Flagman for track No. 2 may return from the west or south*.
(*ad*) o — — — —	Flagman for track No. 2 may return from the east or north*.
(*ae*) — — — — — o	Flagman for track No. 3 may return from the east or north*.

*As prescribed by Rule 99.

SOUND.	INDICATION.
(*af*) o — — — — — o	Flagman for track No. 3 may return from the west or south*.
(*ag*) — — — — o	Flagman for track No. 4 may return from the west or south*.
(*ah*) o — — — — — o	Flagman for track No. 4 may return from the east or north*.
(*ai*) — — o o o	Flagman for track No. 5 may return from the east or north*.
(*aj*) o — — o o o	Flagman for track No. 5 may return from the west or south*.
(*ak*) — — o o o o	Flagman for track No. 6 may return from the west or south*.
(*al*) o — — o o o o	Flagman for track No. 6 may return from the east or north*.

*As prescribed by Rule 99.

15. The explosion of two torpedoes is a signal to proceed at reduced speed.

The explosion of one torpedo will indicate the same as two, but the use of two is required.

Torpedoes must not be placed at passenger stations, on public crossings at grade or on rail joints.

Torpedoes exploded by other than a train or engine must be replaced at once.

16. COMMUNICATING SIGNALS.

NOTE. — The signals described are illustrated by "o" for short sounds; "—" for longer sounds.

SOUND.	INDICATION.
(*a*) oo	When standing, start.
(*b*) oo	When running, stop at once.
(*c*) ooo	When standing, back.
(*d*) ooo	When running, stop at next passenger station.
(*e*) oooo	When standing, apply or release air brakes.
(*f*) oooo	When running, reduce speed.
(*g*) ooooo	When standing, recall flagman.
(*h*) ooooo	When running, increase speed.
(*j*) oooooo	When running, increase train heat.
(*k*) ———— ·	When running, brakes sticking; look back for hand signals.
(*l*) o o o o o o o o	Entirely shut off train heat.

TRAIN SIGNALS.

17. The headlight will be displayed to the front of every train by day and by night. It must be extinguished when a train turns out to meet another

and has stopped clear of main track, or is standing to meet a train at end of two or more tracks or a junction.

It must be dimmed:

(a) While passing through yards where yard engines are employed.

(b) Approaching stations at which stops are to be made or where trains are receiving or discharging passengers.

(c) Approaching train order signals, junctions, terminals, meeting points or while standing on main track at meeting points.

(d) On two or more tracks when approaching trains in the opposite direction.

17a. When the headlight fails, a white light must be used in its place, the bell rung continuously, the whistle sounded frequently, and the train dispatcher notified at first opportunity.

18. Yard engines, and detached road engines when in yards under conditions not requiring display of markers, will display the headlight to the front and rear by night. When not provided with a headlight at the rear, a white light must be displayed.

19. The following signals will be displayed as markers to indicate the rear of the train:

On engines and cars equipped with fixed electric marker lamps, marker lamps lighted showing red to the rear except in manual block signal system territory when clear of the main track, marker

lamps lighted showing yellow to the rear. When not equipped to display yellow, marker lamps will be extinguished and a white light displayed to the rear.

On engines and cars not equipped with fixed electric marker lamps, one marker lamp, lighted by night showing red to the rear, except in manual block signal system territory when clear of the main track, lighted marker lamp will be concealed and a white light displayed to the rear.

19a. A train not equipped to display the markers prescribed by Rule 19 will display a red flag by day and a red light by night to indicate the rear of the train, except in manual block signal system territory when clear of the main track a white light will be substituted for the red.

20. Unless otherwise provided, all sections except the last will display two green lights in the places provided for that purpose on the front of the engine.

21. Extra trains, consisting in whole or in part of passenger equipment with or without caboose, will display two white lights in the places provided for that purpose on the front of the engine.

The display of white signals on other extra trains will be omitted.

On portions of the railroad where no regular trains are authorized, the display of white signals on extra trains may be omitted.

21a. Only trains consisting in whole or in part of passenger equipment with or without caboose will be authorized to represent a schedule.

22. When two or more engines are coupled, signals shall be displayed on the leading engine as prescribed by Rules 20 and 21.

23. One marker lamp or light where in Rules 19, 20 and 21 two are prescribed will indicate the same as two; but the proper display of all train signals is required.

24. When cars are pushed by an engine except when switching or making up trains in yards, a white light must be displayed on the front of the leading car by night.

When an engine is running backward without cars or at the front of a train pulling cars, a white light must be displayed by night at the front in the direction of the movement, if not equipped with a headlight.

25. Each car of a passenger train must be connected with the engine by a communicating signal appliance when engine is so equipped.

26. A blue signal, displayed at one or both ends of an engine, car or train, indicates that workmen are under or about it; when thus protected it must not be coupled to or moved. Each class of workmen will display the blue signals and the same workmen are alone authorized to remove them. Other equipment must not be placed on the same track so as to intercept the view of the blue signals without first notifying the workmen.

When a blue signal is placed at one or both ends of an engine, or cars to which an engine is attached, the engineman and fireman must be notified; they must also be notified when the blue signal is removed.

When emergency repair work is to be done under or about cars in a train and a blue signal is not available, the engineman and fireman will be notified, and protection must be given those engaged in making the repairs.

26a. A yellow flag, and in addition a yellow light by night must be displayed at each end of parked occupied cars.

If cars are placed ahead of parked occupied cars the yellow signals must be placed so as to afford protection, and if cars so placed are removed, the signals must immediately be displayed at the end of the parked occupied cars.

The employe in charge must know that the yellow signals are displayed.

USE OF SIGNALS.

27. A signal imperfectly displayed or the absence of a signal at a place where a signal is usually shown, must be regarded as the most restrictive indication that can be given by that signal, except that when the day aspect is plainly seen, it will govern.

Employes observing a switch where the light is imperfectly displayed or absent, must, if practicable, correct or replace the light.

A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be promptly reported to the superintendent from the first communicating point.

NOTE TO RULE 27. — Reflectors illuminated by head lights may be substituted for switch lights.

28. Trains must reduce speed passing flag stations on their schedule, and must stop for passengers indicating in any way that they wish to board the train. Trainmen as well as enginemen must be on the lookout for passengers at such stations.

29. When a signal, except a fixed signal, is given to stop a train, it must be acknowledged as prescribed by Rule 14 (*g*) or (*h*).

30. Except where the momentary stop and start, forward or backward, is a continuous switching movement, the engine bell must be rung when an engine is about to move; while approaching and passing public crossings at grade; while approaching and passing a train standing on an adjacent track and while approaching and passing passenger station platforms adjacent to the track upon which the train is running.

31. At public crossings at grade equipped with an "R" post instead of a "W" post, whistle signal 14 (1) may be omitted except when there is special occasion therefor.

32. The unnecessary use of the whistle, horn or bell is prohibited.

33. Watchmen stationed at public crossings at grade must use stop signals when necessary to stop trains. They will use prescribed signals to stop highway traffic.

34. Immediately upon seeing a signal affecting the movement of their train or engine, the engineman and fireman must, and when practicable the trainmen will, communicate to each other by its name the indication of each signal affecting the movement of their train or engine.

34a. The indication of fixed signals must be observed until they have been passed.

35. The following signals will be used by flagmen:

Day signals —	**Night signals —**
A Red Flag, Torpedoes and Fusees.	A White Light, Torpedoes and Fusees.

35a. The following signals will be used by trainmen and firemen when protecting engine or front of train:

Day signals —	Night signals —
A Red Flag, Torpedoes and Fusees.	Torpedoes and Fusees.

DESIGNATION AND USE OF TRACKS.

40. Where there are two or four main tracks, the track on the right adjacent to the center line facing west or south, in the direction in which trains are shown by time-table, is designated as No. 1; the next track, No. 3. The track to the right adjacent to the center line facing in the opposite direction is designated as No. 2; the next track No. 4.

Where more than four main tracks, the numbers of the additional tracks and the current of traffic will be specified by time-table.

41. Unless otherwise provided, west or southward trains and engines will use tracks 1 and 3; east or northward trains and engines, tracks 2 and 4.

On three or more tracks when trains are scheduled on other than tracks 1 and 2, the time will be shown in italics (*12.45*); when scheduled on tracks 1 and 2, the time will be shown in ordinary type (12.45), but trains may run on any track by proper signal indication when authorized by Rules 401 or 411.

42. Sidings and other tracks to the right of main track, west or southward in the direction in which trains are shown by time-table, will be designated by odd numbers; the track next to the main track as No. 5, the next track as No. 7, and so on.

Sidings and other tracks on the opposite side will be designated by even numbers; the track next to the main track as No. 6, the next as No. 8, and so on.

44. Unless otherwise provided, movements against the current of traffic, not authorized by Form R train orders, may be made by pilot arrangement. The movement will be supervised by a competent employe whose verbal instructions will supersede time-table superiority and take the place of train orders.

When communication is available, the train dispatcher must inform the employe in charge regarding approaching trains, and the trains to be given preference, and, when practicable, notify approaching trains of the pilot arrangement.

When communication is not available, trains should be moved in accordance with their relative importance.

A flagman must be placed in the direction of opposing traffic, a sufficient distance beyond the detour crossover to insure protection with instructions to hold all trains. In addition to displaying stop signals he must there place two torpedoes on each of the two opposite rails, and remain where stationed, holding the trains until personally instructed otherwise by the employe in charge.

A competent man with stop signals, properly instructed, must also be stationed at each detour crossover and at each inlet between detour crossovers before trains are authorized to proceed.

In automatic block signal system territory both switches of each detour crossover must be operated

to hold the automatic block signals at Stop indication.

When an engine or motor hand car is used, it must follow the train or trains being piloted.

SUPERIORITY OF TRAINS.

71. A train is superior to another train by right or class.

Right is conferred by train order; class by time-table.

Right is superior to class.

73. Extra trains are inferior to regular trains.

MOVEMENT OF TRAINS.

82. Time-table schedules, unless fulfilled, are in effect for 12 hours after their time at each station.

Regular trains more than 12 hours behind either their schedule arriving or leaving time at any station lose both right and schedule, and can thereafter proceed only as authorized by train order.

83. On single track, trains must wait indefinitely at schedule meeting stations unless otherwise directed by train order, except that at such stations and at meeting points created by Form A train orders when a train is entering upon two or more tracks, or upon a route other than that upon which the opposing train is authorized, or is entering CTC territory, it will not wait at such points.

On single track, a regular train must not leave a station at which a train register is located, until it

has been ascertained whether all opposing regular trains, which are due, at or before its schedule time of leaving have arrived.

83a. On single track, an extra train must not leave a station at which a train register is located until it has been ascertained whether all regular trains due have arrived or left.

83b. Unless otherwise provided, on two or more tracks, an extra train must not leave its initial station on any division, or any other station where the schedule of a regular train originates, or a junction, until it has been ascertained whether all regular trains due have left.

83c. Stations at which train registers are located will be designated by time-table. Conductors must examine train registers and obtain information required by Rules 83, 83a and 83b, except that on receiving Register Form D authorized by the train dispatcher, they may omit examining train register at the station or stations designated, and the conductor must register by Register Form E at such station.

Register Form E may also be used at stations designated by time-table.

83d. Unless otherwise provided, a train must not leave a register station until the conductor has registered his train, examined the train register and filled out Register Check Form C and deliver or have it delivered to each engineman of his train.

83e. At stations where no train register is located, the information required by Rules 83, 83a and 83b will be obtained by Register Form D, authorized by the train dispatcher.

84. A train must not start until the proper signal is given.

85. When a train of one schedule is on the time of another schedule in the same direction, it will proceed on its own schedule.

Trains of one schedule may pass trains of another schedule, and extra trains may pass and run ahead of extra trains.

On single and two tracks a section may pass and run ahead of another section of the same schedule, first exchanging train orders, signals and numbers with the section to be passed. The change in sections must be reported from the next available point of communication.

On three or more tracks, a section may pass another section of the same schedule, but must not enter upon single or two tracks except as provided for in the next preceding paragraph.

86. In automatic block signal system territory, unless otherwise provided, an extra train must clear a regular train in the same direction not less than 5 minutes before the regular train is due to leave the next station in the rear where time is shown.

86a. In automatic block signal system territory, unless otherwise provided, extra trains must clear a regular train in the opposite direction not less than 5 minutes before the regular train is due to leave the next station in advance where time is shown; and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99. Extra trains will be governed by train orders with respect to opposing extra trains.

87. In manual block signal system territory, unless otherwise provided, an extra train must clear a regular train in the same direction not less than 5 minutes before the regular train is due to enter the block.

87a. In manual block signal system territory, extra trains must, unless otherwise provided, clear opposing regular trains not less than 5 minutes before such trains are due to enter the block; and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99. Extra trains will be governed by train orders with respect to opposing extra trains.

88. At meeting points between regular trains, and meeting points between extra trains, the west or southward train must take the siding, unless otherwise provided.

At meeting points between regular and extra trains, the extra train must take the siding, unless otherwise provided.

Trains must pull into the siding when practicable; if necessary to back in, the train must first be protected as prescribed by Rule 99. Trains must stop clear of the switch used by the train to be met in going on the siding, unless the train to be met is clear of the main track and switch is properly lined.

If the train which is to hold the main track arrives first, the switch to the siding must be lined, if practicable, for the opposing train. The employe who lines the switch must protect it, unless relieved by a competent employe.

90. The enginemen of each train consisting in whole or in part of passenger equipment with or without caboose will sound signal 14 (n) at least

one mile before reaching a point where by schedule or by train order the train is to meet or wait for an opposing train. Should the engineman fail to sound signal 14 (n), the conductor must take immediate action to stop the train. On other trains, the engineman will give signal 14 (n) at least one mile before reaching a meeting or waiting point.

91. Unless some form of block system is used, the time space to be maintained between trains in the same direction will be regulated on each division by the superintendent.

92. A train must not leave a station in advance of its schedule leaving time.

93. The location of yard limits will be designated by time-table and indicated by yard limit signs. Unless otherwise provided, within yard limits the main track may be used, protecting against regular trains, not protecting against extra trains and engines. Extra trains and engines must move within yard limits at yard speed unless the main track is known to be clear by signal indication, in automatic block signal system, traffic control or centralized traffic control territory.

A train or engine must not be moved against the current of traffic within yard limits until provision has been made for the protection of such movement.

93a. Unless otherwise provided, flagmen of trains carrying passengers, workmen, persons carried under contract or employes deadheading are not relieved from the observance of Rule 99 within yard limits.

NOTE TO RULE 93a. — Persons carried under contract include Postal clerks, express messengers, Pullman conductors and porters, live stock tenders and others (not employes) in charge of freight.

94. If an accident occurs to a train between stations or at a station where an operator is not on duty, and assistance is required, a message, signed by the conductor and engineman, must be sent to the superintendent, giving the location and stating their train or engine will not be moved and will be protected in both directions until the requested assistance arrives. The movement of assistance may then be authorized without addressing a copy of the order to the disabled train as required by Rule 208.

95. Two or more sections may be run on the same schedule.

Each section has equal time-table authority.

A train must not display signals for a following section without train orders, except as prescribed by Rules 85 and 95a.

95a. On two or more tracks, on portions of the railroad and at stations designated by time-table, authority to display signals for a following section per Form F will not be required. A representative of the superintendent at the designated stations will verbally instruct conductors, who will notify enginemen. Conductors must know that signals are displayed as prescribed by Rule 20.

96. On single track, signals as prescribed by Rule 20 must not be ordered displayed to, nor taken down at, other than a station at which a train register is located.

97. Extra trains must not be run without train orders, except that on two or more tracks they may

be run without Form G orders from points designated by time-table and without example (11) Form H orders on portions of the railroad designated by time-table.

98. Trains must approach the end of two or more tracks, junctions, railroad crossings at grade and drawbridges, prepared to stop, unless the switches are properly lined, signals indicate proceed and track is clear. Where required by law trains must stop.

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees. When recalled, or relieved by another flagman, and safety to the train will permit, he may return.

When the conditions require, he will leave the torpedoes and a lighted fusee.

The front of the train must be protected in the same way when necessary by the forward trainman or fireman.

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

Except in emergency, fusees and torpedoes will not be used by trainmen in automatic block signal system territory.

When day signals cannot be plainly seen, owing to weather or other conditions, night signals must also be used.

NOTE TO RULE 99. — When trains are operating under Automatic Block Signal System Rules, protection against following trains will have been complied with when full protection is afforded against trains moving on the same track at restricted speed.

99a. When a flagman is sent out with specific instructions affecting the authority of a train to proceed, such instructions must be in writing and must be shown the enginemen of all trains stopped by him.

99b. When a train crosses over to, or obstructs a track on which the current of traffic is in the opposite direction, it must, unless otherwise provided, first be protected as prescribed by Rule 99 in both directions on that track.

100. When the flagman goes back to protect the rear of the train, and is left behind, another trainman must take his place on the train.

101. Trains and engines must be fully protected against any known condition, not covered by the rules, which interferes with their safe passage.

101a. If any defect or condition which might cause accident is discovered in tracks, signals, bridges, culverts or other structures, the use of the telephone must not be depended on to notify other trains; a flagman must be left. If any member of the train or engine crew has reason to believe that his train has passed over any dangerous defect, the train must be stopped at once and proper protection provided. A prompt report must be made.

101b. When overtaken by severe storms or indication of high water, or any condition which threatens damage, trains must proceed at restricted speed.

Conductors and enginemen must make careful inquiries at all stopping places, and when thought advisable, make extra stops to ascertain the extent and severity of storms; examine bridges and culverts or other places subject to damage by high water, and if they find any indication of danger, must promptly report to the train dispatcher.

102. When an engine leaves a portion of its train on the main track under conditions which may make it difficult for the returning engineman to locate the standing portion, torpedoes must be placed a sufficient distance in advance to serve as a warning.

The detached portion must not be moved until the engine returns, except under full protection.

When a train is disabled or stopped suddenly by an emergency application of the air brakes, or other causes, adjacent tracks as well as tracks of other railroads that are liable to be obstructed must at once be protected until it is ascertained they are safe and clear for the movement of trains.

103. When cars are pushed by an engine, and the conditions require, a trainman must take a conspicuous position on the leading car and when switching over public crossings at grade not protected by a crossing watchman or by gates, a member of the crew must protect the crossings.

103a. When pushing freight cars, or passenger equipment on which air brakes are not in service, or when air brakes are in service, but not controlled

from leading car, the disappearance from view of the trainman's hand signals must be construed as a stop signal.

103b. Cars standing on a track must be properly secured and must clear other tracks, street or highway crossings. When coupling or shoving cars, proper precaution must be taken to prevent accident or fouling other tracks, setting sufficient hand brakes, and, in addition, sending an employe in advance if necessary. Couplings should not be made at a speed greater than four miles per hour. Cars must not be allowed to run over a street or highway crossing without an engine attached.

104. Conductors are responsible for the position of switches used by them and members of their crew, except where switch tenders are stationed. Switches must be properly lined after having been used.

Trains and engines must approach switches where switch tenders are stationed prepared to stop clear of any switch or route unless signal to proceed is received from the switch tender.

A switch must not be left open for a following train or engine unless in charge of a member of the crew of such train or engine.

When practicable, the engineman must see that the switches near the engine are properly lined.

A train or engine must not foul a track until switches connected with the movement are properly lined, or in the case of spring switches, the normal route is seen to be clear. When waiting to cross from one track to another and during the approach or passage of a train or engine on tracks involved, all switches connected with the movement must be

secured in normal position. Switches must not be restored to normal position until a movement is completed or clear of the main track involved.

Where trains or engines are required to be reported clear of main track, at hand-operated switches, such report must not be made until switch has been secured in its normal position.

NOTE TO RULE 104. — Rule 104 applies only to hand-operated switches. When spring or dual controlled switches are operated by hand, they are hand-operated switches and Rule 104 applies.

104a. The normal position for all switches and siding derails is that which leaves the main track clear for the safe passage of trains or engines.

Switches must be latched; main track switches, and those required by rule or special instructions, when in normal position, must be locked and lock tested; after a switch is lined the points must be examined to know that they fit properly.

If a lock is missing or defective, the employe last using must supply another one, or report the absence to the train dispatcher from first available point of communication.

104b. Switches must not be unlocked or unsecured, nor should trainmen or other employes stand near them under conditions in which mishandling or imperfect adjustment might cause accident.

Employes must not pass between, or in front of, engines or cars unless it is known there is sufficient space for safe passage.

Hand brakes must be used to hold cars on grades, or when left in yards, sidings or other tracks; when necessary, car wheels must be blocked.

Before applying hand brakes on passenger and freight equipment, air brakes must be in release position. On equipment having two hand brakes, each operating the brakes on one truck only, it must be understood by train and yard crews that hand brakes applied on one end of this type of equipment may not hold cars on a grade, and such cars when left on a grade must have hand brakes applied on both ends.

Movements on tracks indicated by sign showing letter "A" must have air hose coupled and air brakes operative on all cars.

104c. Employes alighting from a moving train to line facing point main track switch to normal position must, when practicable, get off the rear end of rear car.

When a main track switch has been set for a train, the employe attending the switch must go to the opposite side of the main track and not return to the operating switch stand until the movement has been completed.

On two or more tracks, when not practicable to go to the opposite side of track, employe will stand at least twenty feet from the operating switch stand.

An employe who is to attend a main track switch for a train or engine in siding for the purpose of meeting an opposing train must not go beyond the fouling point until the opposing train has passed.

104d. Derails must be set in the derailing position except while being used. Where equipped with locks, they must be locked. Trainmen and enginemen must be on the lookout for derails on industry tracks, wyes and similar tracks.

104e. Trailing movements against the normal position of a spring switch may be made without throwing the switch. Trains or engines which may stop on a spring switch, after starting a trailing movement through the switch, must not take slack or make reverse movement without first reversing hand thrown switch lever.

When switching over a spring switch, the switch must be thrown by hand.

Spring switches will be indicated by a sign; the location and normal position of main track spring switches will be designated by time-table.

104f. Trailing movements may be made through automatic safety switches in closed position, which movement will automatically operate the switch as it is passed through, setting both switch and switch stand for the route used. When approaching movements conflict, the one for which the switch is set has the right of way. Movements against which the switch is set must not foul the adjoining track unless that track is clear of conflicting movement or until such conflicting movement has been brought to a stop. When switching over this type of switch, it is not necessary to operate completely through before making reverse movement.

104g. Excessive use of sand at any point is prohibited and its use must be restricted to actual necessity. Sand must not be used nor water allowed to run over the movable parts of a spring switch, automatic safety switch, dual control or electrically locked switch, power operated switch, retarders and movable parts of an interlocking.

105. Unless otherwise provided, trains and engines using other than a main track must proceed

at yard speed. Sidings of an assigned direction must not be used in a reverse direction unless authorized by the superintendent or in an emergency under flag protection.

105a. Cars must not be left on sidings when possible to avoid it. When a siding is obstructed, notice must be sent promptly by wire to the train dispatcher.

106. Both the conductor and the engineman are responsible for the safety of the train or engine and the observance of the rules, and, under conditions not provided for by the rules, must take every precaution for protection.

This does not relieve other employes of their responsibility under the rules.

107. When a passenger, mail or express train is receiving or discharging traffic on the side toward a station, a train or engine must not pass between it and the station at which traffic is being received or discharged unless proper safeguards are provided, or the movement is otherwise protected.

Unless otherwise provided, the conductor and the engineman of a passenger, mail or express train receiving or discharging traffic across tracks between their train and station platform, must see that the traffic is protected against trains running on such tracks, except a regular train making schedule stops on its assigned track, or when it is known that other trains have been notified of the stopping of the train at the stations where protection would otherwise be required.

When practicable, conductors of trains which may be involved in an application of Operating Rule No. 107 must ascertain from proper authority

whether regular trains running in the opposite direction, due to arrive before their leaving time, have arrived. When this information is received by telephone, the conductor will repeat same, receive an O.K. before proceeding and so notify the engineman.

108. In case of doubt or uncertainty, the safe course must be taken.

109. Cars must not be "kicked" or "dropped" into a track on which occupied passenger equipment is standing.

When switching occupied passenger equipment, the air brakes on such equipment must be in service.

Occupied passenger equipment must not be detached until stopped.

Every employe, in any way connected with the movement of passenger trains, or the switching and making up of occupied passenger trains at terminals, must exercise the utmost care to provide against any rough handling. The safety, comfort and convenience of passengers must be the first consideration under all circumstances.

When coupling to occupied passenger cars, moving portion must be properly controlled, and the utmost caution used to avoid rough handling. Couplers must be stretched to know that knuckles are locked before coupling up air and steam hose.

111. A train which collects United States mail from cranes, when running on other than its regular track, must stop and exchange mail. Conductor must notify mail clerks.

113. On portions of the railroad specified by time-table there are electrified zones with overhead energized wires where bridge warnings are not maintained. In such zones employes must be governed by special instructions.

114. The points where oil or gas is used for melting snow and ice at switches will be designated by time-table. Diesel engines, RDC cars, kitchen cars and cars placarded "EXPLOSIVES," "DANGEROUS" or "POISON GAS" must not be left standing on switches while oil or gas is burning or where a fire is burning which may be communicated to equipment.

Highway-Rail cars, motor-hand cars gasoline operated, or any other gasoline operated units will not be operated over switches or tracks while snow-melting appliances are in use or where a fire is burning which may be communicated to equipment until all flames have been extinguished.

115. Indications of signals convey no authority for trains or engines to exceed speed restrictions established by train order, time-table, other rules or special instructions.

RULES FOR MOVEMENT BY TRAIN ORDERS.

201. For movements not provided for by time-table, unless otherwise provided, train orders will be issued by authority and over the signature of the superintendent and only contain information or instructions essential to such movements.

They must be brief and clear; in the prescribed forms when applicable; and without erasure, alteration or interlineation.

Figures in train orders must not be surrounded by brackets, circles or other characters.

202. Each train order must be given in the same words to all employes or trains addressed.

203. Train orders must be numbered consecutively each day, beginning at midnight.

204. Train orders must be addressed to those who are to execute them, naming the place at which each is to receive his copy. Those for a train must be addressed to the conductor and engineman, also to anyone who acts as its pilot. A copy for each employe addressed must be supplied by the operator.

Orders addressed to operators restricting the movement of trains must be respected by conductors and enginemen the same as if addressed to them.

204a. Enginemen must show train orders and other prescribed forms to firemen, and when practicable to forward trainmen. Conductors must show train orders and other prescribed forms, when practicable, to trainmen. Trainmen and firemen must read and be familiar with the contents of train orders and other prescribed forms, and, should there be occasion to do so, remind conductors or enginemen of the contents thereof, and the time of superior trains which must be cleared.

204b. When a train has more than one engine in service, each engineman must be provided with copies of all train orders and other prescribed forms.

205. Each train order must be written in full in a book provided for the purpose in the office of the train dispatcher; and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and the responses transmitted; and the train dispatcher's initials. These records must be made at once and never from memory or memoranda. Additions to train orders must not be made after they have been repeated.

206. In train orders regular trains will be designated by numbers as "No 10," and sections as "Second 10," adding engine numbers if desired. Extras will be designated by engine numbers and the direction as "Extra 400, 'East' or 'West'." Work extras will be designated by engine numbers, as "Work extra 400." For the movement of an engine of another company, the initials will precede the engine number.

Even hours (as 10 00 a m) must not be used in stating time in train orders or motor hand car forms.

In transmitting train orders, the numbers of trains and engines in the address may be pronounced and then spelled, letter by letter if so desired. All stations and numerals in the body of an order or motor hand car form must first be plainly pronounced and then spelled, letter by letter, thus:

Putnam, P-u-t-n-a-m, and One O Five, O-n-e O F-i-v-e.

The letters duplicating names of stations and numerals will not be written in the train order book nor upon train order forms.

In transmitting train orders, the train dispatcher must write the order as he transmits it and underscore each word and figure at the time it is repeated.

Unless otherwise provided, when two or more engines are coupled and a designation is made by engine numbers, the number of the leading engine will be used in train orders.

For MU equipment the number of the leading car will be used in train orders, unless otherwise provided.

207. To transmit a train order, the signal "19" followed by the direction must be given to each office addressed, the number of copies being stated, if more or less than three — thus: "19, East, copy 2."

208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable, and sent first to the train or trains of which the right or schedule is to be restricted. When not sent simultaneously to all, the order must be sent first to the train or trains of which the right or schedule is to be restricted.

Each office will take its proper address, and, when practicable, must include the operator at the meeting or waiting point.

Copies of the order addressed to the operator at the meeting or waiting point must be delivered to the trains affected until all have arrived from one direction except delivery will not be made to trains not required to wait as per Rule 83.

Except when a meeting or waiting point is at an interlocking station or initial station for the train, train orders must not be sent to a train at the meeting or waiting point if it can be avoided. When an order is so sent, except at an interlocking station or

initial station for the train, the order must contain the words "——gets this order at——"and special precautions must be taken to insure safety.

NOTE TO RULE 208. — Train dispatchers will instruct operators at each end of block when they do not have copies of the order involved.

209. Operators receiving train orders must write or typewrite them in manifold during transmission. If the requisite number of copies cannot be made at one writing, they must make others from the original copy and repeat to the train dispatcher from the new copies each time additional copies are made. They must retain a copy of each train order. The word "Complete," the time, and the signature of the operator must be in his handwriting.

211. When a train order has been transmitted, operators must, unless otherwise directed, repeat it at once from the manifold copy, in the succession in which the several offices have been addressed. Each operator receiving the order should observe whether the others repeat correctly. When the order has been repeated correctly by an operator, the response "Complete," and the time, will be given by the train dispatcher. The operator receiving this response will then write on the order in manifold the word "Complete," the time, and his last name, acknowledge by his personal signal, and personally deliver a copy to each person addressed without taking his signature, but when delivery to engineman will take the operator from the immediate vicinity of his office, the engineman's copy will be delivered by the conductor or trainman.

When a train order restricting the right or schedule of a train is issued for it at the point where

such right or schedule is restricted, the train must be brought to a stop before delivery of the order.

213. A train order restricting the right or schedule of a train must be repeated before "Complete" is given to other trains affected.

214. When a train order has been repeated and before "Complete" has been given, the order must be treated as a holding order for the train addressed, but must not be otherwise acted on until "Complete" has been given.

If the means of communication fails before an operator has repeated a train order, the order at that office is of no effect and must be there treated as if it had not been sent.

215. Clearance Form A must be filled out by the operator before clearing a train, showing thereon, without erasure or alteration, the total number of train orders and the number of each train order, if any, addressed to a train. The time shown on Clearance Form A must not be earlier than the time the last train order was made complete; and, when a train order was issued on a previous date, the Clearance Form A will also show the date issued. He will then repeat from Clearance Form A to the train dispatcher the information shown thereon. The dispatcher will make the required record in the train order book, and if operator has correctly repeated the numbers of all train orders addressed to a train will respond by giving "OK," the time and his initials, which the operator will endorse on the Clearance Form A.

If all orders held for a train have been completed, and communication fails before Clearance Form A

has been OK'd by train dispatcher, the operator may deliver such orders accompanied by Clearance Form A, and bearing notation "Wire has failed," which will be acted upon as though "OK" had been given in the usual way. When communication is restored, operator will notify train dispatcher of each train cleared, the time, and the numbers of the orders delivered, which train dispatcher will record in train order book.

Clearance Form A must be delivered together with all train orders to each person addressed. Conductors, enginemen and firemen must, and when practicable trainmen will, see that the information shown on Clearance Form A corresponds with the train orders received.

Operators will retain a copy of each Clearance Form A.

216. For train orders delivered by the train dispatcher, the requirements as to the record and delivery are the same as at other offices.

217. When a train order which does not restrict the right or schedule of a train is to be delivered to a train at a point not a train order office, or at one at which the office is closed, it must be addressed to "*C & E——at (or between)—— care of——*," and forwarded and delivered by the conductor or other person in whose care it is addressed and who is responsible for its delivery. When the train order restricts the right or schedule of the train, "Complete" will be given upon the signature on the order of the person by whom the order is to be delivered, who must be supplied with copies for the conductor and engineman addressed, and a copy upon which he shall take their signatures. This copy he must

deliver to the first operator accessible who must at once transmit the signatures of the conductor and engineman to the train dispatcher and preserve the copy.

When restricting orders are issued in the above manner, the operator must write on top margin of clearance the word "RESTRICTING" and will repeat this to the train dispatcher when clearing the train with the order.

Train orders so delivered must be acted on as if "Complete" had been given in the usual way.

For train orders which are sent, in the manner herein provided, to a train of which the right or schedule is being restricted, "Complete" must not be given to other trains affected until the signatures of the conductor and engineman of the train of which the right or schedule is being restricted have been sent to the train dispatcher.

218. When a train is named in a train order by its schedule number alone, all sections of that schedule are included, and each must have copies delivered to it.

219. An operator must not repeat a train order restricting the movement of a train which has been cleared or of which the engine has passed his train order signal in proceed position until he has obtained the signatures of the conductor and engineman to the order.

If necessary to issue a second Clearance Form A, the original Clearance Form A must be destroyed, and the second Clearance Form A must show the numbers of all train orders addressed to the train.

220. Train orders once in effect continue so until fulfilled, superseded or annulled. Any part of an order specifying a particular movement may be either superseded or annulled.

Train orders held by or issued for or any part of an order relating to a regular train become void when such train loses both right and schedule as prescribed by Rules 4 and 82, or its schedule is annulled.

When a conductor or engineman, or both, are relieved before the completion of a trip, all train orders and instructions held must be delivered to the relieving conductor or engineman. Such orders or instructions must be compared by the conductor and engineman before proceeding.

220a. The first and second paragraphs of Rule 220 must not be applied by operators to the address of a train order. Each order must be delivered by the operator to those addressed as prescribed by Rules 210 and 211, unless the order is annulled.

221. In manual block signal system territory the normal indication of the fixed train order signal is "Stop" when there is an operator on duty. It must not be changed to "Proceed" while train orders are held for delivery to any train in that direction. The signal must be returned to "Stop" as soon as a train has passed. While "Stop" is indicated trains must not pass the signal without Clearance Form A, except as prescribed by Rules 221d and 221f.

When an operator receives the signal "19" followed by the direction, he must immediately display the "Stop indication" for the direction indicated and then reply "Stop displayed," adding the direction.

221a. In automatic block signal system territory on two or more tracks where fixed train order signals are provided, they govern trains moving only with the current of traffic; they shall indicate "Stop" when trains are to be stopped for train orders. When there are no train orders the light will be extinguished. When an operator receives the signal "19" followed by the direction, he must immediately display the "Stop indication" for the direction indicated, and then reply "Stop displayed," adding the direction. While orders are held for delivery the signal must remain at "Stop." While "Stop" is indicated, trains must not pass the signal without Clearance Form A, except as prescribed by Rules 221d and 221f.

In automatic block signal system territory on single track where fixed train order signals are provided, the normal indication of the signal is "Proceed." When an operator receives the signal "19" followed by the direction, he must immediately display the "Stop indication" for the direction indicated and then reply "Stop displayed," adding the direction. The signal must not be changed to "Proceed" while train orders are held for delivery. While "Stop" is indicated, trains must not pass the signal without Clearance Form A, except as prescribed by Rules 221d and 221f.

221b. At interlocking stations not equipped with a governing fixed train order signal and where trains are not required by time-table to obtain Clearance Form A, an operator having train orders restricting the right or schedule of a train will display the governing interlocking signal at "Stop" and then reply "Stop displayed." After the train has stopped, a red flag by day and a red light by night will be displayed

in the direction of the train. After the signal has been acknowledged, the interlocking signal must remain at "Stop" until the orders have been delivered. If the order does not restrict the right or schedule of a train the operator will display the governing interlocking signal at "Stop." In addition, he will display a yellow flag by day and a yellow light by night in the direction of the train. After the signal has been acknowledged, the operator will then display the interlocking signal to indicate "Proceed" and the train may then proceed to the interlocking station, but not beyond without receiving Clearance Form A.

The above combinations of signals must be acknowledged by the engineman as prescribed by Rule 14 (g).

221c. At a train order office not equipped with a governing fixed train order signal or a governing interlocking signal and where trains are not required by time-table to obtain Clearance Form A, when an operator receives the signal "19" followed by the direction, he must immediately display a double staff red flag by day and in addition a red light by night to the right of and adjacent to the proper track to stop trains and then reply "Stop displayed," adding the direction. While train orders are held for delivery the signal must not be removed. While "Stop" is indicated, trains must not pass the signal without Clearance Form A, except as prescribed by Rules 221d and 221f.

In foggy or stormy weather, or where the view is obscured, in addition to the red signal displayed, two torpedoes must be placed and left on the rail not less than 500 feet from the signal in the direction of the train for which the orders are held.

221d. In delivering a train order that does not restrict the right or schedule of the train or Clearance Form A without stopping a train, the operator must leave the train order signal at "Stop indication," go on the ground and give signal as prescribed by Rule 12 (b), using a yellow flag by day and a yellow light by night, and hand the orders or Clearance Form A to the engineman and conductor. This combination of signals must be acknowledged as prescribed by Rule 14 (g) and the speed of the train reduced sufficiently to enable the operator to deliver the order or Clearance Form A. If the engineman or conductor fails to catch the order or Clearance Form A, the train must be stopped and not proceed without Clearance Form A. When a block is occupied per Rules 317c, 318a or 327 the train must be brought to a stop before delivery of Clearance Form A.

221f. The engineman of a train approaching a station at which the train order signal is at "Stop indication" must acknowledge the signal as prescribed by Rule 14 (g) and may then pass it to do station work or clear main track, provided other signals, right, schedule and rules permit. The train must not proceed without Clearance Form A.

222. Operators must promptly record and report to the train dispatcher the time of arrival and departure of all trains and the direction of extra trains. They must, when practicable, observe trains and report at once to the train dispatcher if the proper signals are not displayed.

223. The following abbreviations may be used:

Initials for signature of superintendent and train dispatcher.

Such office and other signals as are arranged by the superintendent.

C & E — Conductor and Engineman.
Eng — Engine.
Jct — Junction.
MPH — Miles Per Hour.
MHC — Motor Hand Car.
No — Number.
Opr — Operator.

The usual abbreviations for the names of the months and stations.

224. The train dispatching telephone circuit is for the exclusive use of employes concerned in the movement of trains and must not be used for any other purpose unless authorized.

When called, operator must immediately respond by pronouncing clearly name of station, and await instructions. Communications, except train orders, must be acknowledged by the word "Right" followed by the personal signal of the operator. To communicate with the train dispatcher, first listen and if the line is clear, close the transmitter circuit and announce station. The train dispatcher will respond by saying "Right," or "Cut Out."

226. To relay a train order, the train dispatcher must transmit it to the relaying operator who will then transmit it to destination. The conductor or engineman receiving it at destination must repeat it to the relaying operator, who on the copy he retains must underscore each word and figure as it is repeated to him, and then repeat it to the train dispatcher, and if correct, "Complete" will be given per Rule 211, and relayed to destination.

TRAIN ORDER SIGNALS.

Aspects may be shown by the position of semaphore arms or color of lights. Day and night aspects for color light signals shall have the same colors as the night aspects of the semaphore signals, except as prescribed by Rules 221a and 221c.

230.

Fig. 1

Fig. 2

INDICATION — Stop; train orders for train.
NAME — Stop train order signal.

231.

Fig. 1

Fig. 2

INDICATION — Proceed; no train orders.
NAME — Clear train order signal.

FORMS OF TRAIN ORDERS.

NOTE. — In the forms shown, the words and figures in *italics* are examples, indicating the manner in which orders are to be filled out.

A.

FIXING MEETING POINTS FOR OPPOSING TRAINS.

(1.) *No 1* meet *No 2* at *B*.
No 3 meet *Second 4* at *B*.
No 5 meet *Extra 400 east* at *B*.
Extra 400 west meet *Extra 401 east* at *B*.

(2.) *No 2 and Second 4* meet *No 1* at *C*
Extra 402 west at *D* (and so on).
No 1 meet *No 2* at *B Second 4* at *C*
and Extra 403 east at *D*.

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the rules.

These orders may be modified by adding:
No 1 take siding.
No 2 take siding at B.

B.

DIRECTING A TRAIN TO RUN AHEAD OF ANOTHER TRAIN.

(1.) *Extra 400 east* run ahead of *No 2 B* to *E*.

The first-named train will run ahead of the second-named train between the points designated.

(2.) *Extra 401 west* run ahead of *No 3 B* until overtaken.

The first-named train will run ahead of the second-named train from the designated point until overtaken, and then arrange for the rear train to pass promptly.

E.

TIME ORDERS.

NOTE. — This form of order must not be issued to opposing regular trains.

(1.) *No 1* run *20 minutes* late *A* to *G*.

This does not affect No. 1's leaving time at G.

This makes the schedule time of the train named, between the stations designated, as much later as stated in the order, and extra trains receiving the order are required to run with respect to this later time as before required to run with respect to the regular schedule time.

The time in the order should be such as can be easily added to the schedule time.

(2.) *No 1* wait at *B* until *10 01 a m* for *Extra 400 north*.

The train first named must not pass the designated point before the time given, unless the other train has arrived. The train last named is required to run with respect to the time specified, at the designated point or any intermediate station where schedule time is earlier than the time specified in the order, as before required to run with respect to the schedule time of the train first named.

(3.) *Nos 1* and *3* wait at *N* until *9 59 a m*
P until *10 30 a m*
R until *10 55 a m*
etc.

The train, or trains, named must not pass the designated points before the times given. Extra trains receiving the order are required to run with respect to the time specified, at the designated points or any intermediate station where schedule time is earlier than the time specified in the order, as before required to run with respect to the schedule time of the train, or trains, named.

F.

FOR SECTIONS.

(1.) *Eng 750* display signals and run as *First 1 A* to *Z*.

To be used when the number of the engine for which signals are displayed is unknown and to be followed by (2), both being single-order examples.

(2.) *Eng 401* run as *Second 1 A* to *Z*.
The engine named will not display signals.

(3.) *Second 1* display signals *H* to *K* for *Eng 404*.
The engine named will not display signals.

(4.) *Engs 400 401* and *402* run as *First Second* and *Third 1 A* to *Z*.

The engine last named will not display signals.

To substitute one engine for another on a section, (5) will be used.

(5.) *Eng 750* instead of *Eng 751* display signals and run as *Second 1 G* to *M*.

The second-named engine will drop out at G and be replaced by the first-named engine; following sections need not be addressed.

If the second-named engine is the last section the words "display signals and" will be omitted.

To annul a section for which signals have been displayed over a division, or any part therof, when no train is to follow the signals, Form K must be used.

When sections are run to an intermediate point of a schedule, the train orders must specify which engine or engines shall assume the schedule beyond such point.

G.

EXTRA TRAINS.

(1.) *Eng 601* run extra *A* to *F*.

To authorize an engine to run from one designated point to another.

(2.) After *Extra 603 south* arrives at *G Eng 605* run extra *G* to *B*.

The second-named train must not leave the first-named point until the arrival of the first-named train. When conditions require (2) may be amplified by (3).

(3.) After *Extra 630 south* which left *B* at *2 10 p m* arrives at *G Eng 635* run extra *G* to *B*.

(4.) *Eng 465* run extra *A* to *H* this order is annulled at *7 05 p m* .

A train receiving this order must, at the time specified, clear the main track.

To authorize in advance, a later movement of an extra train from a point at which there is no means of communication, or at which the office is closed, (5) will be used.

(5.) On *July 24* after *6 45 a m Eng* 450 run extra *A* to *C*.

The train must not leave the point first-named before the time specified in the order.

On single track, to authorize the movement of an extra train without protecting against following extra trains, (6) or (7) will be used.

(6.) *Eng 547* run extra *A* to *E* not protecting against *southward* extra trains.

Protection against southward extra trains is not required. Southward extra trains must not be authorized to leave the point first-named until the order has been fulfilled or annulled, except when it is known the train named has passed an intermediate station between the points designated, when the movement of a following extra train may then be authorized to that station.

(7.) *Eng 790* run extra *A* to *E* protecting against *Extra 602 south* after *1 30 p m* not protecting against other *southward* extra trains.

Protection only against Extra 602 south after 1 30 p m is required.

Southward extra trains must not be authorized to leave the point first-named until the order to the first-named train has been fulfilled or annulled, except Extra 602 south after 1 30 p m or when it is known the first-named train has passed an intermediate station between the points designated, when the movement of a following extra train may then be authorized to that station.

Examples (1.), (2.), (3.), (4.), (5.), (6.) and (7.) give the extra no right to occupy the main track

between the switches of the siding at the point last named. When it is desired that the extra shall continue to a point beyond the entrance switch to the siding at the point last-named, such as passenger station, freight house or wye track, or where there is no passing siding, such specific point may be designated:

Example — *Eng 601* run extra *A* to *freight house* at *E*.

(8.) *Eng 602* run extra *A* to *F* and return to *C*.

(9.) *Engs 631* and *632* coupled run extra *A* to *F* and return to *C*.

The extras designated in examples (8) and (9) must go to *F* before returning to *C*.

These orders give the extra no right to occupy the main track between the switches of the siding at *F* on the going trip, and at *C* on the return trip.

H.

WORK EXTRA.

For Single Track.

(1.) *Eng 792* works extra *6 59 a m* until *6 01 p m* between *D* and *E*.

(2.) *Engs 792* and *793* coupled works extra *6 59 a m* until *6 01 p m* between *D* and *E*.

To authorize in advance a work extra from a point at which there is no means of communication or at which the office is closed, (3) will be used.

(3.) On *Aug 30 Eng 792* works extra *6 45 a m* until *11 01 a m* between *D* and *E*.

The work extra must, whether standing or moving, protect itself against extra trains within the

working limits in both directions as prescribed by the rules. The time of regular trains must be cleared.

These may be modified by adding:

(4.) *Not protecting against eastward extra trains.*

The work extra will protect only against westward extra trains. The time of regular trains must be cleared.

(5.) *Not protecting against extra trains.*

Protection against extra trains is not required. The time of regular trains must be cleared.

(6.) *Protecting against Extra 401 west not protecting against other extra trains.*

Protection only against Extra 401 west is required. The time of regular trains must be cleared.

(7.) *Protects against Extra 402 east and after 10 15 a m against Extra 760 west not protecting against other extra trains.*

Protection against Extra 402 east, and after 10 15 a m against Extra 760 west only required; Extra 760 west must not enter the working limits before 10 15 a m. The time of regular trains must be cleared.

When a work extra has been instructed by order to not protect against extra trains, and afterward it is desired to have it clear for, or protect itself after a certain hour against a designated extra, (8) will be used.

(8.) Work Extra *517 clears* (*or protects against*) *Extra 995 east* between *D* and *E* after *2 10 p m.*

Extra 995 east must not enter the working limits before 2 10 p m and will then run expecting to find the work extra clear of the main track (or protecting itself) as the order may require.

To enable a work extra to work upon the time of a regular train, (9) will be used.

(9.) Work Extra *900* protects against *No 55* (*or—regular* trains) between *D* and *E*.

The work extra may work upon the time of the train or trains mentioned in the order, and must protect itself against such train or trains. The regular train or trains receiving the order will run expecting to find the work extra protecting itself.

When a work extra is to be given exclusive right over all trains, (10) will be used.

(10.) Work Extra *599* has right over all trains between *D* and *E 7 05 p m* until *1 15 a m*.

This gives the work extra the exclusive right between the points designated between the times named.

Whenever extra trains are run over working limits, they must be given a copy of the order sent to the work extra. Should the working order instruct a work extra to not protect against extra trains in one or both directions, extra trains must protect against the work extra; if the order indicates that the work extra is protecting itself against other trains, they will run expecting to find the work extra protecting itself.

The working limits should be as short as practicable; to be changed as the progress of the work may require.

Work extras must give way to all trains as promptly as practicable.

Examples (1.), (2.) and (3.) confer no right to the work extra to occupy the main track between the switches of the siding at either of the points designated, unless the order names some other specific point at each end of the working limits.

When a train order is issued directing a work extra to clear or protect against another train between an intermediate station and either end of the working limits, the order must name a specific point at which such instructions will apply at the intermediate station.

For Two or More Tracks.

(11.) Eng *400* works extra on *No 2* track (*or tracks*) *6 45 a m* until *5 01 p m* between *D* and *E*.

(12.) *Engs 631* and *632* coupled works extra on *No 1* and *No 2* tracks *6 45 a m* until *5 01 p m* between *D* and *E*.

The work extra must, whether standing or moving, protect itself within the working limits against extra trains moving with the current of traffic on the track or tracks named. The time of regular trains must be cleared.

To enable a work extra to work upon the time of a regular train, (13) will be used.

(13.) Work Extra *900* protects against *No 55* (*or—regular* trains) between *D* and *E*.

The work extra may work upon the time of the train or trains mentioned in the order and must protect against such train or trains.

The regular train or trains receiving the order will run expecting to find the work extra protecting itself.

When it is desired to move a train against the current of traffic over the working limits, provision must be made for the protection of such movement.

When a work extra is to be given exclusive right over all trains, (14) will be used.

(14.) Work Extra *990* has right over all trains on *No 2 and No 1* tracks between *G* and *H 6 30 p m* until *1 01 a m*.

This gives the work extra the exclusive right to the track or tracks mentioned in both directions between the points designated between the times named.

The working limits should be as short as practicable; to be changed as the progress of the work may require.

Work extras must give way to all trains as promptly as practicable.

Examples (11.) and (12.) confers no right to the work extra to occupy the main track between the switches of the siding at either of the points designated, unless the order names some other specific point at each end of the working limits.

J.

HOLDING ORDER.

(1.) Hold *No 2*.

(2.) Hold *all (or eastward) trains*.

(3.) Hold *all eastward trains on No 4 track.*

When a train has been so held it must not proceed until the order to hold is annulled, or an order given to the operator in the form:

————————*may go.*

These orders will be addressed to the operator and acknowledged in the usual manner.

Form J will be used only when necessary to hold trains until orders can be given, or in case of emergency.

K.

ANNULLING A SCHEDULE OR A SECTION.

(1.) *No 1* due to leave *A Feb 29* is annulled *A* to *Z.*

(2.) *Second* 5 due to leave *E Feb 29* is annulled *E* to *G.*

The schedule or section annulled becomes void between the points named and cannot be restored.

Form K will not be combined with other forms of train orders.

Form K orders, once issued to a conductor or engineman, continue in effect to them, although the schedule, section number, running or work order of their train be changed.

L.

ANNULLING AN ORDER.

(1.) Order *No 10* is annulled.

If an order which is to be annulled has not been delivered to a train, the annulling order will be addressed to the operator, who will destroy all copies

of the order annulled but his own, and write on that:

Annulled by order No——.

An order which has been annulled must not be re-issued under its original number.

M.

ANNULLING PART OF AN ORDER.

(1.) That part of order *No 10* reading *No 1* meet *No 2 at D* is annulled.

Form M will be used only when that part of the order not annulled is clear in its wording.

P.

SUPERSEDING AN ORDER OR PART OF AN ORDER.

This order will be given by adding to prescribed forms the words "instead of——".

(1.) *No 1* meet *No 2* at *C* instead of *B*.

An order which has been superseded must not be re-issued under its original number.

When a train is directed to take siding for another train, such instructions apply only at the point designated in that order, and do not apply to the superseding order unless so specified.

R.

PROVIDING FOR A MOVEMENT AGAINST THE CURRENT OF TRAFFIC.

(1.) *No 1* has right over opposing trains on *No 2* track *C* to *F*.

(2.) *Extra 750 west* has right over opposing trains on *No 2* track *C* to *F*.

(3.) *Westward* trains have right over opposing trains on *No 2* track *E* to *G*.

The designated train or trains must use the track specified between the points named and have right over opposing trains on that track between those points. Opposing trains must not leave the point last named until the designated train or trains arrive.

These orders may be modified as follows:

(4.) After *No 4* arrives at *C No 1* has right over opposing trains on *No 2* track *C* to *F*.

The train to be moved against the current of traffic must not leave the first-named point until the arrival of the first-named train.

A train must not be moved against the current of traffic until the track on which it is to run has been cleared of all opposing movements.

Within yard limits the track must also be cleared of engines. A copy of the order must be sent to the yardmaster on duty, otherwise to the engines.

Engines must not occupy the track on which the designated train or trains are to run until such train or trains arrive.

When moving trains against the current of traffic the train order will name the specific point to which the train is authorized to run, such as interlocking limits, crossover, or other designated point, and, when there is more than one crossover at either of the points named, designate the crossover or crossovers to be used except within interlocking limits.

FORM 19

FORM 19

The New York, New Haven and Hartford Railroad Company

TRAIN ORDER No.....11.....

..... 19....

To..... At.....

.....Superintendent.

..... Train Dispatcher.

Each employe addressed must have a copy of this order.

Made	Time	Operator
Complete	2 16 P M	Black

(To be printed on green paper)

A

A

The New York, New Haven and Hartford Railroad Company

CLEARANCE FORM A

.....M.....19.....

To C & E.....

At.....

.....

I have.....orders for your train.

No. ..... No. ..... No. ..... No. ..... No. .....

No. ..... No. ..... No. ..... No. ..... No. .....
have been delivered and there are no further orders for your train.

This form is authority to pass Stop-indication of Train Order or Manual Block Signal.

BLOCK.....

.....

.....

.....

.....

.....

.....

.....Operator

Manifold copies will be made for each conductor, engineman and operator; the latter retaining a copy.

The New York, New Haven and Hartford Railroad Company

REGISTER CHECK FORM C

.....19.....

To Engineman, train.....

At.....M.

All regular trains due, have arrived and left, except.....

(If no exceptions write "None")

.....

.....

Conductor.....

The New York, New Haven and Hartford Railroad Company

REGISTER FORM D

.....19.....

To C & E.....

At.....

(A) All regular trains due to arrive and leave.....

.....

.....

.....

at or before.....M. .....19.....

have arrived and left, except.....

.....(If no exceptions write "None")

(B) Train.....

need not register at.....

.....

.....Superintendent

.....Train Dispatcher

This form will be issued only when authorized by the Train Dispatcher. Each employe addressed must have a copy.

The New York, New Haven and Hartford Railroad Company

REGISTER FORM E

.....19....

Operator at.....

Copy the following on your "Train Register."

.....Conductor

Date.....

Train, Section.....Number.....

Engine.....

Cars.....L.....E.....

Arrival.....

Departure.....

Were green signals displayed?.....

From.....to.....

Conductor.....

Engineman.....

The New York, New Haven and Hartford Railroad Company

CLEARANCE FORM K

.....Station.....19....

To C & E.....on.....track,

Signal governing movement.....

.....cannot be cleared.

Proceed at restricted speed as prescribed by Rules 663 and 663a.

.....Operator

If the signal is used as a manual block signal, manual block signal system rules will also apply.

(To be printed on red card)

MANUAL BLOCK SIGNALS.

Aspects may be shown by the position of semaphore arms or color of lights.

Day and night aspects for color light signals shall have the same colors as the night aspects of the semaphore signals.

301a.

Fig. 1

Fig. 2

INDICATION—Stop.
NAME—Stop signal.

301b.

Fig. 1

Fig. 2

INDICATION—Proceed.
NAME—Clear signal.

MANUAL BLOCK SIGNAL SYSTEM RULES.

305. Block signals or their equivalent govern the use of the blocks, but, unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

305a. Fixed train order signals will be used as block signals where separate block signals are not provided. At an interlocking station, which is also a block station, where a separate block signal is not provided, the interlocking signals specified by timetable will be used also as block signals. The proceed indication per Rule 601j of a dwarf signal, when used as a manual block signal, will, in addition to the requirements of Rule 601j, indicate a clear block.

305b. At block stations not provided with a separate block signal or an interlocking signal or a fixed train order signal used for that purpose, Clearance Form A will be substituted.

305c. When fixed train order signals or interlocking signals are used as block signals, block signal rules will apply to them.

306. When a block station is open at an irregular hour, trains must be notified, when possible, by train order or by special instructions.

307. A train having entered other than a clear block must not accept a proceed indication at any intermediate block station which was closed when such train entered the block without receiving Clearance Form A.

308. When Clearance Form A is used information will be shown as to condition of block "clear" or "occupied", and when necessary, additional explanatory information, as prescribed by the rules, except as provided by Rule 333. If Clearance Form A indicates the block is occupied by a preceding train or a work extra, or when verbal permission is received to enter a block occupied by a preceding train or by a work extra at a closed block station or a non-block station, train will proceed prepared to stop short of train ahead.

308a. On single track and with the current of traffic on two or more tracks a block indicated as clear as prescribed by the rules, does not indicate that the main track within yard limits is unoccupied. Unless otherwise provided, within yard limits Rule 93 applies.

OPERATORS.

311. Signals must be kept in the position displaying the most restrictive indication, except when cleared for an immediate movement.

312. Appliances must be operated carefully and only by those charged with that duty. If any irregularity affecting their operation is detected the signals must be displayed to give their most restrictive indication until repairs are made.

313. Operators must observe, as far as practicable, whether the aspects of the signals correspond with the position of the levers or the aspects of the indicators.

314. Operators must not make nor permit any unauthorized repairs, alterations or additions to the apparatus.

Any defects in the appliances must be immediately reported to the train dispatcher.

315. A block record must be kept at each block station. Operators must promptly record all information required thereon.

316. When two or more tracks are used in the same direction, operators must, when obtaining, releasing or clearing blocks, specify the track.

317. On single track, to admit a train to a block, or portion of a block, the operator must examine the block record, and, if the block or portion of the block is clear, give "Block for————" to the operator at the next block station. The operator in advance must examine the block record, and if there is no train in the block, and if it is proper for the train to be admitted, will reply "OK blocking for————". The operator at the entrance to the block must then display the proper signal indication, except as provided in Rules 305b and 326a.

A train must not be admitted to a block, or portion of a block, which is occupied, except as provided in Rules 317a, 317b, 317c, 317d and 333.

317a. To admit a train to a block or portion of a block, to meet opposing trains at a closed block station, a non-block station, or a siding located in advance of the block signal, by train order or by time-table, or when the block is occupied by a work extra, the operator must examine the block record, and, if the block or portion of the block is clear of all but the train or trains to be met, or the work extra, give "Block for————except————" to the operator at the next block station.

The operator receiving this request must examine the block record, and, if there is no train in the block, or portion of the block, except the train or trains to be met, or the work extra, will reply "OK block occupied by——". When authorized by the train dispatcher, the approaching train will then be admitted to the block or portion of the block, with Clearance Form A reading: "Block occupied by————no other trains in block", or "Block occupied by————block clear of preceding trains to————", and at a closed block station, or a non-block station, to the block or to the portion of the block by verbal permission, when authorized by the train dispatcher.

When trains are to meet by train order or by time-table at an open block station, where the block signal is located between the siding switches or other switch to be entered before reaching the block signal, the operator must not give a clear block for the train which is to take siding. In such cases train will be admitted to the block as prescribed by this rule.

317b. To admit a train awaiting the arrival of an opposing train to a block, the operator must examine the block record, and, if the block is clear of all but the expected train, give "Block for————after arrival of————" to the operator at the next block station.

The operator receiving this request must examine the block record, and, if there is no train in the block other than the expected train, will reply "Block clear for————after arrival of————."

When authorized by the train dispatcher, the train may then be given Clearance Form A reading: "Block clear after arrival of————."

317c. To permit a train to follow a train, other than a passenger train, into a block, or portion of a block, the operator must examine the block record, and, if the block, or portion of the block, is clear of all but the train to be followed, give "Block for————to follow————" to the operator at the next block station.

The operator receiving this request must examine the block record, and, if there is no train in the block, or portion of the block, other than the train to be followed, will reply "Block not clear of———— all right for————".

When authorized by the train dispatcher the following train may then be admitted to the block with Clearance Form A reading: "Block occupied by————no other trains in block", and at a closed block station, or a non-block station, to the block or to the portion of the occupied block by verbal permission, when authorized by the train dispatcher.

317d. In case an extra train has left a block station expecting to clear an opposing regular train per Rule 87a, and fails to do so, the train dispatcher may authorize the regular train to enter the occupied block by a train order addressed to the operator and the train in the following form:"———— left————at————and has not reported clear proceed at reduced speed operator at————will release————". Clearance Form A will then be issued reading: "Block occupied by————no other trains in block".

This order will be issued only when so directed by chief or assistant chief train dispatcher on duty.

318. On two or more tracks, to admit a train to a block, or portion of a block, the operator must ex-

amine the block record, and, if the block or portion of the block is clear, display proper signal indication, except as provided by Rules 305b and 326a. A train must not be admitted to a block, or portion of a block, which is occupied, except as provided in Rules 318a and 333.

318a. To permit a train to follow a train, other than a passenger train, into a block, or portion of a block, or when a block is occupied by a work extra, the operator may, when authorized by the train dispatcher, admit the following train to the block with Clearance Form A reading: "Block occupied by————no other trains in block", and at a closed block station, or a non-block station, to the block, or to the portion of the occupied block by verbal permission, when authorized by the train dispatcher.

319. When a train enters a block, the operator must give train number and the time to the operator at the next block station ahead. When the rear of the train has passed 300 feet beyond the block signal, or in the absence of a block signal, beyond the block station, he must give the record of the train to the operator at the next block station in the rear.

320. Unless otherwise provided, operators must not ask for the block until they have received a report of the train from the operator at the next block station in the rear.

321. Operators must, as far as practicable, observe all passing trains and note whether they are complete and in order, and the markers properly displayed. Should a train without markers pass a block station, the operator must notify the operator

at the next block station in each direction, and must not report that train clear of the block, nor clear the signal for the block in the rear, until he has ascertained that the train is complete.

322. Should a train pass a block station with any indication of conditions endangering the train, or a train on another track, the operator must immediately notify the operator at the next block station ahead, and each must display Stop-indications to all trains that may be affected, and must not permit any train to proceed until it is known that its track is not obstructed.

325. An operator informed of any obstruction in a block must immediately notify the operator at the other end of the block and each must display Stop-indications to all trains that may be affected and must not permit any train to proceed until it is known that its track is not obstructed.

326. When a train takes a siding or otherwise clears a block, or portion of a block, the operator, when he knows that it is clear, must report the train and the time to the operator at the other end of that block.

The operator must obtain control of the block or portion of the block to be used before permitting a train to enter that block. He may accept information from conductor regarding the movements of other trains, and then apply the rules to the block, or portion of the block, to be used.

When a train clears a block at a block station at a switch operated by the operator, the conductor is not required to report clear. When a train, other than a passenger train, is within yard limits it may

be reported as clear, provided the operator has seen the markers or has been notified by the conductor. A following train, other than a passenger train, may then be admitted to the block by Proceed-indication or Clearance Form A, reading: "Block clear" or as prescribed by Rule 326a.

326a. At a closed block station or a non-block station, the operator in control of the block may, when authorized by the train dispatcher, give verbal permission for a train to enter a clear block, or a clear portion of a block, and at a block station to a clear portion of a block with Clearance Form A reading: "Block clear to————", and when conditions permit "Block clear to————and return to————", or for a work extra, "Block clear between————and————".

327. To permit a train to cross from one main track to another, the operator must examine the block record, and if all the blocks affected are clear of approaching trains he must provide block protection before permission is given, and until the movement is complete and block clear, trains will not be admitted to the block. All crossover movements must be entered on the block record.

328. When coupled trains are separated, as prescribed by Rule 364, the operator must regard each portion as an independent train.

329. When necessary to stop a train for which a Proceed-indication has been displayed and accepted, the operator must give hand signals in addition to displaying the Stop-indication.

333. When, from any cause, an operator is unable to communicate with the operator at the next

block station ahead, or the train dispatcher, he must stop all trains approaching in that direction. Should no cause for detaining a train be known, it may then be permitted to proceed on its time-table or train order authority, provided ten minutes have elapsed since the passage of the last preceding train, with a Clearance Form A endorsed: "Wire has failed."

334. Hand signals must not be used when the proper indication can be displayed by the block signals, except as prescribed by Rules 329 or 343.

335. Block signals for a track apply only to trains moving with the current of traffic on that track. Movements against the current of traffic authorized by Form R train order must be blocked per Rule 335a. To indicate a clear block, operators must use: at interlocking block stations, a proceed green hand signal given from the window or platform facing the approaching train or Clearance Form A; at other block stations, Clearance Form A.

335a. On two or more tracks, to admit a train authorized by Form R train order to move against the current of traffic, to a block, or portion of a block, the operator must examine the block record, and, if the block, or portion of the block is clear of preceding trains, give "Block for———— to move against the current of traffic on track No———" to the operator at the next block station.

If it is proper for the train to be admitted, the operator at the next block station will reply "OK blocking for————".

The train may then be admitted to the block as prescribed by Rule 335.

A train must not be admitted to a block which is occupied by a preceding train, except as prescribed by Rule 317c.

When trains are authorized by Form R train order to move against the current of traffic to a crossover located between block stations, the operator may, when authorized by the train dispatcher, admit an opposing train to the block with Clearance Form A reading: "Block clear to———— crossover at ————".

336. Operators are responsible for the care of the block station, lamps and supplies and, unless otherwise provided, of the signal apparatus.

337. Lights in block stations must be so placed that they cannot be seen from approaching trains.

339. If a Stop-indication is disregarded, the fact must be reported to the operator at the next block station ahead and then to the train dispatcher.

340. To open a block station, the operator must notify the next block station in each direction and record the trains that are in the extended block.

When trains, which were in the extended block when the block station was opened and which had passed his block station before it was opened, clear the block ahead, he must repeat the record to the operator at the block station in the rear.

341. A block station must not be closed except upon authority of the train dispatcher.

342. Unless otherwise provided, a block station must not be closed until the block in each direction is clear of all trains moving under a block indication that would not be proper for the extended block.

To close a block station, when the block is clear, the operator must notify the next block station in each direction. When the block is not clear, the operator will notify the next block station in each direction with a record of the trains in the extended block and, when he receives an acknowledgment, the block signals must then be secured in the clear position, all lights extinguished, and the block wires and, when necessary, other circuits arranged to work through the closed block station unless otherwise provided.

343. When a block station is open at an irregular hour, operators must use hand signals, in addition to block signals, to give the required indications until all trains have passed which have not been notified that the block station is open.

344. Operators must not permit unauthorized persons to enter the block station.

ENGINE AND TRAIN CREWS.

361. Block signals for a track apply only to trains moving with the current of traffic on that track.

Enginemen of trains authorized by Form R train order to move against the current of traffic must not pass a block station, except as provided in Rule 335.

362. Trains must not pass a block signal displaying Stop-indication without receiving Clearance Form A, except as prescribed by Rule 362a.

362a. The engineman of a train approaching a station at which the block signal (except an interlocking signal used as a block signal) is at Stop-indication, must acknowledge the signal as prescribed by Rule 14 (g) and may then pass it to do station work or clear main track, provided other signals, right, schedule and rules permit. The train must not proceed without Clearance Form A.

363. Trains must not proceed on hand signals as against block signals, except as provided in Rule 663.

364. Unless otherwise directed, when two or more trains have been coupled and so move past any block station, they must be separated only at a block station and the operator notified.

365. When a train, other than a passenger train, is within yard limits, or when a train takes a siding or otherwise clears a block, or a portion of a block, unless the switch involved is operated by the operator, conductor must so report promptly to the operator. A train must not enter a block, or portion of a block, or foul the main track, or cross from one main track to another, or proceed beyond the point to which the block is clear as verbally instructed by the operator or as indicated by Clearance Form A, without permission of the operator, except as provided in Rule 365b.

A train having passed beyond the limits of a block, or a portion of a block, that has been reported clear, must not back into that block, or portion of the block, without permission of the operator.

When directed by the operator to clear a portion of a block, conductor must not so report until the rear of the train has passed 300 feet beyond the designated point.

365a. An extra train must not go to any point from which there is no means of communication with an operator, to clear regular trains.

365b. When, from any cause, a conductor is unable to communicate with an operator from a closed block station, a non-block station, or a cross-over, the train may proceed on its train order or time-table authority. When following a preceding train proceed at reduced speed, provided 10 minutes have elapsed since the passage of such train.

370. When there is an obstruction between block stations, notice must be given to the nearest operator.

371. When a train is stopped by a block signal, or an interlocking signal used as a block signal, the conductor or engineman must, when practicable, immediately ascertain the cause.

372. Conductors must report to the train dispatcher any unusual detention at block stations.

373. A block station must not be considered as closed, except as provided for by time-table or special instructions.

374. When a train receives Clearance Form A filled out as shown in Rule 317b, it must not leave that station until the designated train has arrived.

375. When a train or motor hand car passes a preceding train, work extra or motor hand car at a closed block station or a non-block station, the train or motor hand car passed must not follow the preceding train or motor hand car into the block without permission of the operator, and then only as prescribed by the rules, except as provided in Rule 365b.

RULES GOVERNING THE MOVEMENT OF TRAINS IN THE SAME DIRECTION BY AUTOMATIC BLOCK SIGNALS.

401. On portions of the railroad so specified on the time-table, trains will run with reference to other trains in the same direction by block signals whose indications will supersede the superiority of trains.

402. The train dispatcher must be advised in advance of any known condition that will delay the train or prevent it from making usual speed.

403. Except as affected by Rule 401 all block signal and operating rules remain in force.

RULES GOVERNING OPPOSING AND FOLLOWING MOVEMENT OF TRAINS BY AUTOMATIC BLOCK SIGNALS.

411. On portions of the railroad, and on designated tracks so specified on the time-table, trains will be governed by block signals whose indications will supersede the superiority of trains for both opposing and following movements on the same track.

412. A train for which direction of traffic has been established must not move in the opposite direction without proper interlocking signal indication or train order.

413. The train dispatcher must be advised in advance of any known condition that will delay the train or prevent it from making usual speed.

414. Except as affected by Rule 411 all block signal and operating rules remain in force.

FIXED SIGNAL ASPECTS.

420. Aspects shall be shown by position of semaphore arms, color of lights, position of lights, flashing of lights, or any combination thereof. They may be identified by number plate, letter plate, marker light, shape and color of semaphore arms, or any combination thereof.

DUMMY MASTS

421.

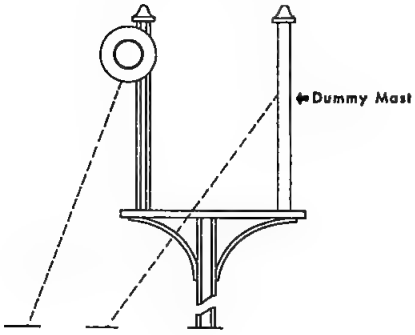


Fig. 1

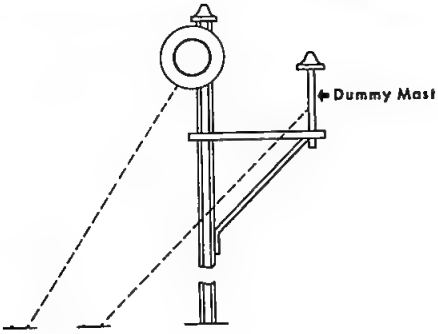


Fig. 2

One or more dummy masts as in Figures 1 and 2 indicates that there are one or more tracks between the active signal and the track it governs.

DISTANT SWITCH SIGNALS.

425. Distant switch signals are used in connection with a switch or switches to govern the approach thereto.

426. SIGNAL INDICATIONS.

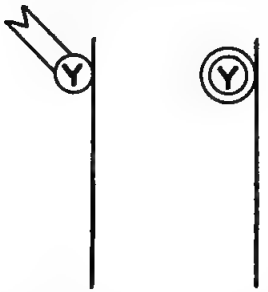


Fig. 1 Fig. 2

INDICATION—Reduce speed at once and proceed at restricted speed to the facing point switch or switches which such signal protects.

NAME—Restricting distant switch signal.

427.

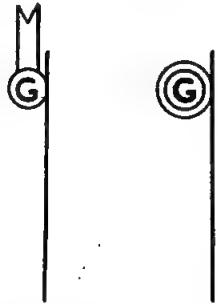


Fig. 1 Fig. 2

INDICATION—Proceed.

NAME—Clear distant switch signal.

NOTE. — The indications of these signals do not relieve employes from the observance of manual block signal system rules.

AUTOMATIC BLOCK SIGNALS.

501a.

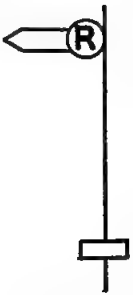


Fig. 1

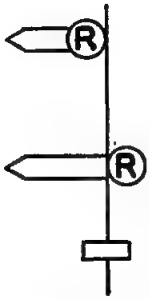


Fig. 2

Fig. 3

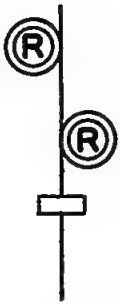


Fig. 4

INDICATION—Stop; then proceed at restricted speed. See Rule 509 or Rule 509a.

NAME—Stop and proceed.

501b.

Fig. 1

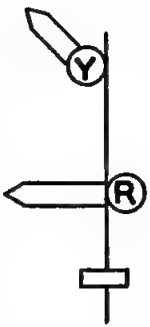


Fig. 2

Fig. 3

Fig. 4

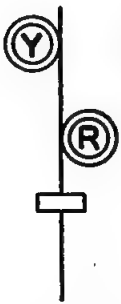


Fig. 5

Fig. 6

INDICATION—Proceed preparing to stop at next signal. Trains exceeding medium speed must at once reduce to that speed.

NAME—Approach.

501c.

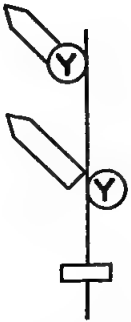


Fig. 1

Fig. 2

INDICATION—Proceed preparing to stop at second signal on same or diverging route; train exceeding 40 miles per hour must at once reduce to that speed.

NAME—Advance approach.

501d.

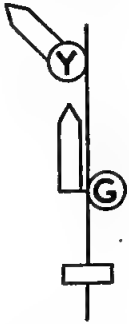


Fig. 1

Fig. 2

INDICATION—Proceed approaching next signal at medium speed.

NAME—Approach medium.

501e.

Fig. 1

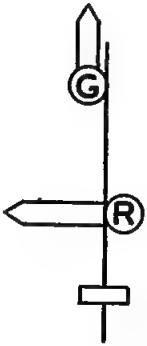


Fig. 2

Fig. 3

Fig. 4

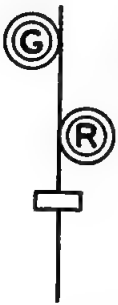


Fig. 5

Fig. 6

INDICATION—Proceed.
NAME—Clear.

AUTOMATIC BLOCK SIGNAL SYSTEM RULES.

505. Block signals, cab signals, or both, govern the use of the blocks, but, unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

506. Unless otherwise provided, movements against the current of traffic authorized by Form R train order must be blocked as prescribed by Rules 318 and 318a. The train order shall designate the block stations. To indicate a clear block, operators must use: at the interlocking block stations named in the order, a proceed green hand signal given from the window facing the approaching train or Clearance Form A; at other block stations named in the order, Clearance Form A.

506a. When, from any cause, the automatic block signals become inoperative, Manual Block Signal System Rules applicable for following movements on two or more tracks and for both following and opposing movements on single track may, upon train order authority, be substituted for the territory affected and during the period such rules as are in effect will supersede automatic block signal system rules.

The train order will specify the territory and designate the points which will be block stations and length of time manual block signal system rules will be in effect. Unless otherwise required the order may be issued as follows: "Rule 506a in effect between A and F on————track from———— until———— ————is block station." If more than one block station is to be named, they will be indicated by "————are block stations."

To indicate a clear block, operators must use: at the interlocking block stations named in the order, a proceed green hand signal given from the window facing the approaching train or Clearance Form A; at other block stations named in the order, Clearance Form A.

506b. Equipment of a type which may not operate signals or shunt track circuits must not be operated in automatic block signal system territory without manual block protection.

NOTE. — This rule also applies to RDC (Mack) cars and single unit RDC (Budd) cars.

506c. When required to provide manual block protection for equipment which may not shunt track circuits in automatic block signal system territory at stations where trains are not required by time-table to obtain Clearance Form A, operators must use governing fixed train order or interlocking signals for protection against other movements, and when not provided with such signals must display a double staff red flag by day and in addition a red light by night as prescribed by Rule 221c.

506d. When light engines or RDC cars are stopped on sand in automatic or interlocking signal territory, the car or engine must immediately be moved to get at least one truck of the car or engine off the sanded rail.

ENGINE AND TRAIN CREWS.

507. Block signals, as far as practicable, are located to the right of or above the track which they govern.

507a. Block signals of the semaphore type which operate in the upper quadrant, display arm or arms to the left of the signal mast as viewed from an approaching train or engine, and in addition display lights of the prescribed color as required.

507b. Block signals of the color light type display their indications by lights of prescribed color as viewed from an approaching train or engine.

508. On a track signaled for traffic in both directions, block signals apply to trains and engines in the direction of their movement.

508a. On a track signaled for traffic in one direction, block signals apply only to trains and engines moving with the current of traffic.

508b. Automatic block signals which may display "Stop then proceed" indication are designated by number plates or letter "A".

509. On single track when a train or engine is stopped by a "Stop and proceed" signal, unless a more favorable indication is immediately displayed; the conductor or engineman must immediately communicate with the train dispatcher and the train or engine may proceed without flag protection at restricted speed to the next signal upon verbal advice from the train dispatcher in the words, "There is no opposing train in the block." If communication with train dispatcher is not immediately available, train or engine may proceed at restricted speed, to the next signal, preceded by a flagman.

When an automatic block signal equipped with disc "S" displays "Stop then proceed" indication and the disc "S" is illuminated, the train or engine

may pass this signal without stopping and proceed at restricted speed to the siding and must take siding. When the signal displays "Stop then proceed" indication and the "S" is not illuminated, the train or engine will proceed as prescribed in the first paragraph of Rule 509.

509a. On two or more tracks, unless otherwise provided, trains or engines may pass "Stop and proceed" signals without stopping, proceeding at restricted speed through the entire block, expecting to find a train or engine in the block, broken rail, obstruction or switch not properly lined.

509b. A train or engine having passed an automatic signal indicating "Stop then proceed," must, unless otherwise provided, continue to the next signal at restricted speed even though a preceding train or engine clears between block signals, or condition created by open switch, derail, or broken rail has been corrected or other obstruction removed before reaching next signal, even though indication of signal in advance may be observed before reaching it.

510. When a train or engine is stopped by a block signal which is evidently out of order, unless otherwise provided, the fact must be promptly reported to the train dispatcher.

511. Both switches of a cross-over must be open before a train or engine starts to make a cross-over movement, and the movement must be completed before either switch is restored to normal position.

513. At hand-operated switches, enginemen and trainmen of trains or engines before entering a main track, or crossing from one main track to another,

must, when means of communication are immediately available, obtain permission from the operator or train dispatcher. This will not relieve employes from the duty of promptly and properly protecting the movement as required by the rules.

At bolt-locked switches after operating the bolt-lock, trainmen must wait not less than five minutes before operating the switch.

At switches not equipped with a locking device, trainmen will operate the switch and wait at the switch not less than five minutes before making train or engine movement, except that if it is immediately after a train or engine has passed the switch the movement may be made at once.

When a train or engine is to use an electrically or mechanically locked hand-operated switch the lock must be operated in accordance with instructions posted adjacent to the switch.

When locking device releases the switch for operation the movement may be made at once without waiting 5 additional minutes.

Should the lock fail to release the employe controlling locking device must be notified. No attempt to force the apparatus must be made.

When through using, the switch must be lined and locked in the normal position and locking device returned to normal position, padlocked and employe controlling locking device promptly notified.

Trainmen must not open switch nor give hand signal to move if there is a train or engine approaching within sight or hearing on the track or tracks involved. Unless otherwise protected or provided, entrance to a main track through a spring switch must be made under the provisions of this rule, operating the switch by hand.

Where Rule 411 applies, operators must not give permission or unlock an electric locked hand-operated switch for a train or engine to enter a main track or to cross over to the main track involved when the route has been released for an opposing movement until the opposing train or engine has passed the switch, except as prescribed by Rule 94.

514. A train or engine entering a block between signals must be protected as required by the rules and must proceed at restricted speed to the next signal even though indication of signal in advance may be seen before reaching it.

514a. When a train or engine has passed a signal permitting it to proceed and is delayed in the block, it must proceed at restricted speed to the next signal.

514b. A train or engine having passed beyond the limits of a block must not back into that block, except under protection as prescribed by Rule 99 or train order.

515. A train, engine or cars on sidings or other tracks must stand clear of insulated joints placed in the track at the clearance point.

When a train or engine enters a siding or other track, the main track switch shall be kept open until the entire train or engine has passed the insulated joints at the clearance point.

Trains or engines proceeding from sidings or other tracks, to the main track, must remain clear of the insulated joints at the clearance point on such tracks until the main track switch has been opened.

516. On portions of the railroad so specified on the time-table, lights will not be maintained on trailing point switches, nor on facing point switches

which are located not more than 300 feet beyond an automatic block signal.

517. When Rules 506 or 506a are in effect, enginemen of trains must not pass a block station without receiving the prescribed hand signal or Clearance Form A, and are not relieved from the observance of Interlocking Rules.

518. Where the authorized maximum speed for passenger trains is 60 or more miles per hour, and for freight trains 50 or more miles per hour, when movements are made without automatic block signal protection, passenger trains must not exceed 55 miles per hour and freight trains must not exceed 45 miles per hour. Movements against the current of traffic over facing point switches not interlocked must not exceed 30 miles per hour.

AUTOMATIC CAB SIGNAL SYSTEM RULES.

550. Aspects and indications of cab signals will be specified by time-table.

551. Cab signal system is in service on portions of the railroad and on tracks so specified by the time-table.

552. Unless otherwise provided, enginemen must make the required departure tests before leaving engine terminal. Engine shall not be dispatched from engine terminal for movement over cab signal territory when device is not in proper operative condition, except yard engines working within yard limits or other unequipped engines when so authorized for movement by the proper authorities, not exceeding 20 miles per hour.

553. When cab signal apparatus of a train fails or when cab signal indications conflict with fixed signal indications at two fixed signal locations in succession, thereby indicating a probable defect in the cab signal apparatus, such train will proceed, governed by fixed signal indications but not exceeding 40 miles per hour to the next communicating office or interlocking station and report to the train dispatcher.

When operators in charge of communicating offices or interlocking stations have been notified by the train dispatcher that the track between such communicating office or interlocking station and the next communicating office or interlocking station must be clear of preceding trains before the train is permitted to proceed, a train order will be issued reading: "Proceed at speed authorized for an equipped train and be governed by fixed signal indications————to————." Where the authorized maximum speed is 80 or more miles per hour, trains must not exceed 79 miles per hour.

Operators will use fixed train order or interlocking signals to stop trains when the track ahead to the next communicating office or interlocking station is not clear of preceding trains.

Unless the train is authorized by train order to proceed at the speed of an equipped train, or as prescribed by Rule 552, it will proceed on fixed signal indications, but not exceeding 40 miles per hour.

553a. When there is a failure of the cab signal apparatus, engineman may cut out the warning whistle if it continues sounding after he has acknowledged.

554. Unless otherwise provided, should cab signal and fixed signal indications conflict, the more restrictive indication will govern.

555. Cab signal indications do not supersede fixed signal indications, except when cab signal changes to a more restrictive or a more favorable indication after passing a fixed signal, cab signal indication will govern.

556. When the cab signal changes to a more restrictive indication, engineman must acknowledge the change of indication.

557. Enginemen must not operate the acknowledging lever until warning whistle sounds, the change in indication has been observed and is being obeyed.

558. In cab signal territory, if the warning whistle sounds longer than 6 seconds, the fireman must immediately go to the engineman.

559. When the cab signal indication changes from restricted speed to a more favorable indication after passing a fixed signal, entering a block at a hand-operated switch, or on restricting dwarf signal indication, speed must not be increased until train has run its length.

INTERLOCKING SIGNALS.

601a.

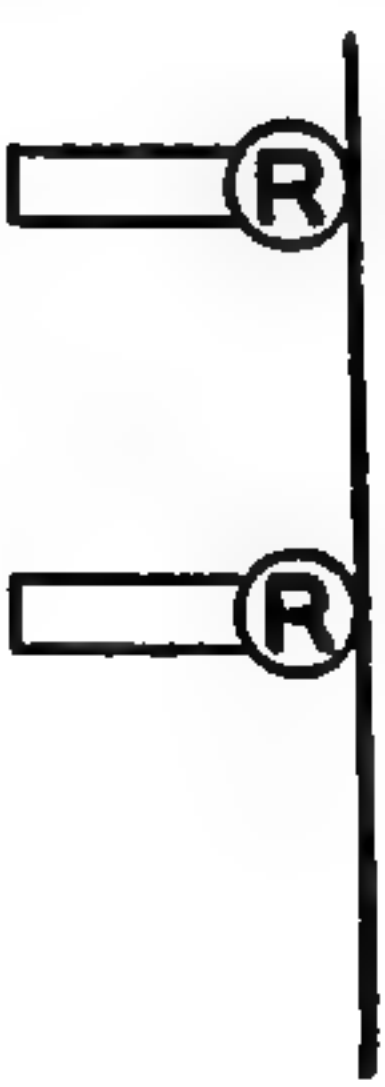


Fig. 1

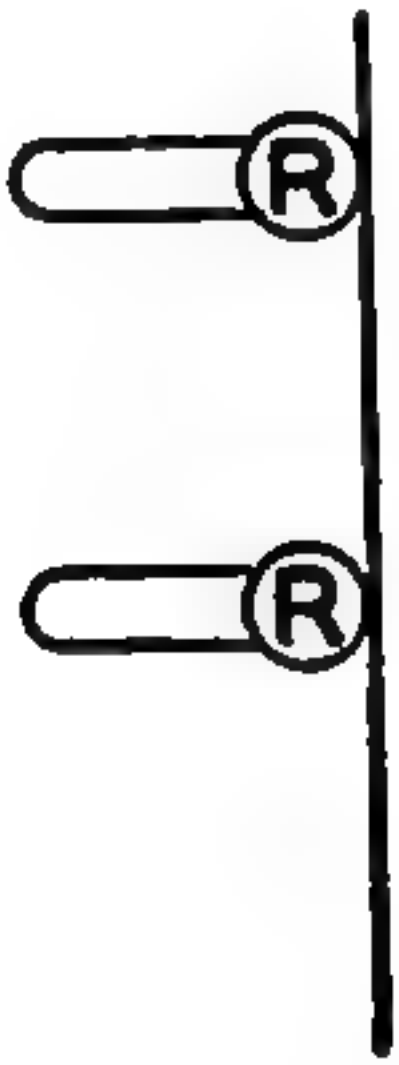


Fig. 2

Fig. 3

Fig.4

Fig. 5

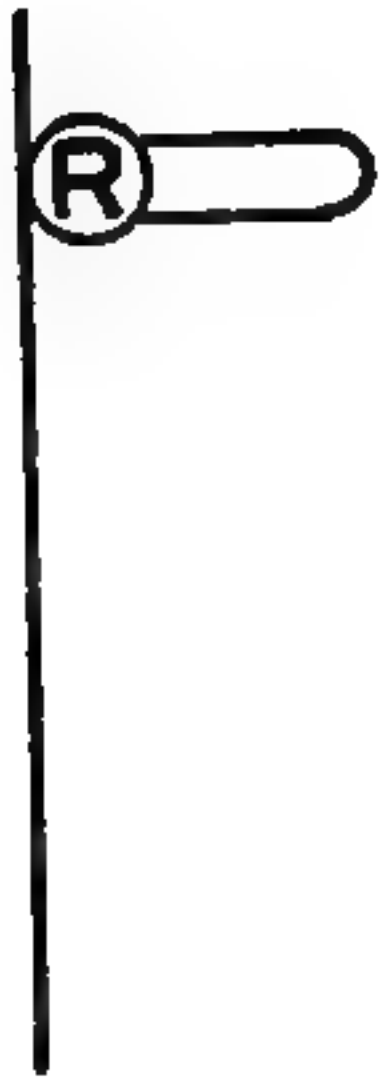


Fig. 6

INDICATION—Stop.

NAME—Stop.

601b.

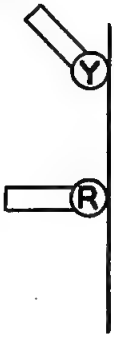


Fig. 1

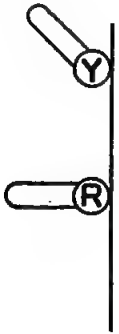


Fig. 2

Fig. 3

Fig. 4

Fig. 5

INDICATION—Proceed preparing to stop at next signal. Train exceeding medium speed must at once reduce to that speed.

NAME—Approach.

601c.

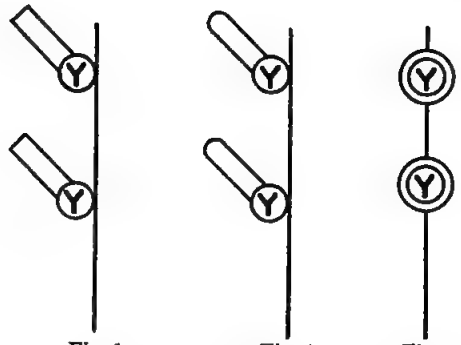


Fig. 1 Fig. 2 Fig. 3

INDICATION—Proceed preparing to stop at second signal on same or diverging route. Trains exceeding 40 miles per hour must at once reduce to that speed.

NAME—Advance approach.

601d.

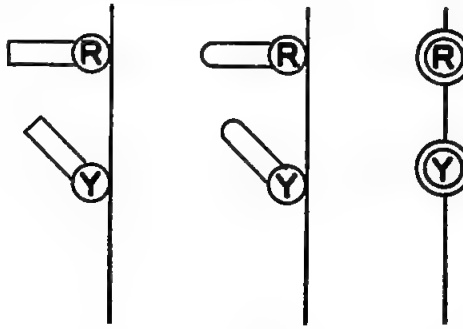


Fig. 1 Fig. 2 Fig. 3

INDICATION—Proceed at medium speed preparing to stop at next signal.

NAME—Medium approach.

601e.

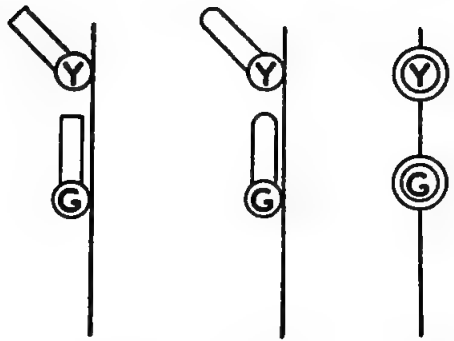


Fig. 1 Fig. 2 Fig. 3

INDICATION—Proceed approaching next signal at medium speed.

NAME—Approach medium.

601f.

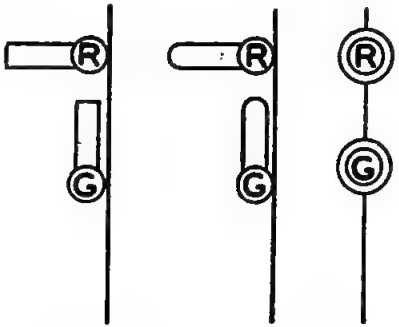


Fig. 1 Fig. 2 Fig. 3

INDICATION—Proceed; medium speed within interlocking limits.

NAME—Medium clear.

601g.

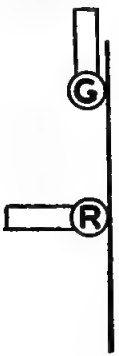


Fig. 1

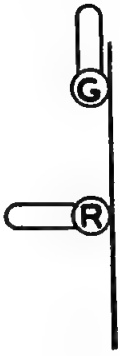


Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

INDICATION—Proceed.

NAME—Clear.

601h.

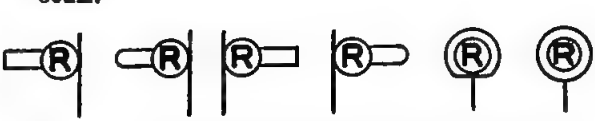


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6

INDICATION—Stop.

NAME—Stop.

601j.

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6

INDICATION—Proceed at restricted speed within interlocking limits.

NAME—Restricting.

601k.

Fig. 1 Fig. 2 Fig. 3 Fig. 4

INDICATION—Proceed; slow speed within interlocking limits.

NAME—Slow clear.

INTERLOCKING RULES.

605. Interlocking signals govern the use of the routes of an interlocking, and as to movements within interlocking limits, their indications supersede the superiority of trains, and engine and train crews are relieved from observing Rules 99 and 99b.

Movement against the current of traffic beyond interlocking limits must not be made except under flag protection or by train order.

Light engines or switching movements with the current of traffic which may proceed beyond interlocking limits for the purpose of making a reverse move as governed by a reverse dwarf signal are relieved from observing Rule 99.

605a. Interlocking signals, as far as practicable, are located to the right of or above the track which they govern.

605b. Interlocking signals of the semaphore type which operate in the upper quadrant, display arm or arms to the left of the signal mast; those which operate in the lower quadrant, display arm or arms to the right of the signal mast, as viewed from an approaching train or engine, and in addition display lights of the prescribed color as required.

605c. Interlocking signals of the color light type display their indications by lights of prescribed color as viewed from an approaching train or engine.

606. EMERGENCY SIGNALS.

(Whistle or Horn.)

NOTE. — The signals prescribed are illustrated by "o" for short sounds; "——" for longer sounds.

SOUND.	INDICATION.
(a) ———	All trains and engines within interlocking limits stop immediately.
(b) oo	Resume normal movement after receiving the proper signal or permission from the operator.
(c) ooo	Whistle or horn test.
(d) oooo	Call signal maintainer.

607. Interlocking signals, except dwarf signals, located in automatic block signal system territory, are a part of the automatic block signal system.

OPERATORS.

611. Unless otherwise provided, signals must be kept in the position displaying the most restrictive indication, except when displayed for an immediate movement.

612. Appliances must be operated carefully and only by those charged with that duty. If any irregularity affecting their operation is detected the signals must be displayed to give their most restrictive indication until repairs are made.

613. When the route is set the signals must be operated sufficiently in advance of approaching trains or engines to avoid delay.

614. Unless otherwise provided, a signal must be restored so as to display the most restrictive indication as soon as the train or engine for which it was cleared has passed it.

615. When necessary to change any route for which the signals have been cleared for an approaching train or engine, switches, movable frogs or derails must not be changed or signals cleared for any conflicting route until the train or engine for which the signals were first cleared has stopped.

616. The lever operating a switch, derail, movable frog or lock must not be moved when any portion of a train or engine is standing on or closely approaching the switch, derail or movable frog.

617. Operating levers must be blocked or marked and should not be used when a track, switch or signal is undergoing repairs or when a track is obstructed.

619. If the force whose duty it is to keep switches clear when snow is falling or drifting, or during sleet and ice storms, is not on hand when required, the fact must be promptly reported to the train dispatcher.

620. If a signal fails to work properly, its operation must be discontinued and until repaired the signal secured so as to display its most restrictive indication.

621. Operators must observe, as far as practicable, whether the indications of the signals correspond with the positions of the levers. An interruption of signal power or a change from one signal power line to another may cause signals which are

clear to go to stop indication. Immediately following such changes, signal indications should be checked with positions of levers, and, if necessary, levers must be restored to stop position and then cleared again.

622. Operators must not make nor permit any unauthorized repairs, alterations or additions to the interlocking.

Any defects in the interlocking must be promptly reported to the train dispatcher.

623. If there is a derailment or if a switch, movable point frog or derail is run through, or if any damage occurs to the track or interlocking, the signals must be restored so as to display their most restrictive indication, and no movement permitted until all parts of the interlocking and track liable to consequent damage have been examined and are known to be in a safe condition.

624. When necessary to disconnect, or if it is impossible to lock a switch, movable point frog, derail, facing point lock or electric locking circuits, all switches, movable point frogs and derails affected must be securely spiked or fastened in the required position and the levers blocked or marked in such a manner that they cannot be operated, before any train or engine is permitted to pass over the parts or routes affected.

625. When switches, movable point frogs, derails or signals are undergoing repairs, Stop-indication must be displayed for any movement which may be affected by such repairs, until it has been ascertained from the maintainer that the switches, movable point frogs and derails are properly lined for such movement.

626. Operators must, as far as practicable, observe all passing trains and note whether they are complete and in order; should there be any indication of conditions endangering the train or engine, or any other train or engine, the operator must take such measures for the protection of trains and engines as may be practicable.

628. Hand signals must not be used when the proper indication can be displayed by the interlocking signals.

629. If necessary to authorize a train or engine to pass any interlocking signal indicating stop, the employe in immediate charge of such signal, or his representative, will give a proceed yellow hand signal, or Clearance Form K. When not practicable to give a proceed yellow hand signal or Clearance Form K, verbal permission may be given.

When hand signals are necessary, they must be given from the center of the track on which the train or engine movement is to be made.

The employe in charge must, as far as practicable, know, before authorizing the movement, that the switches are properly lined and that the route is safe for passage of the train or engine.

The employe in charge must not authorize a movement on two or more tracks by a proceed yellow hand signal, Clearance Form K or verbal permission to a track authorized for movement in both directions as per Rule 411 if the use of such track has been released for movement in the opposite direction, except to comply with Rule 94.

630. Operators are responsible for the care of the interlocking station, lamps and supplies.

631. Lights in interlocking stations must be so placed that they cannot be seen from approaching trains or engines.

633. If a train or engine overruns a Stop-indication, the fact must be reported at once to the train dispatcher.

634. Operators must not permit unauthorized persons to enter the interlocking station.

635. During a stated period an interlocking station may be closed upon authority of the train dispatcher. When so closed, unless otherwise provided, switches and switch levers must be secured for routes that do not conflict and signal levers placed in position so that signals will display the proper indication.

The interlocking station must be securely locked.

636. Equipment of a type which may not shunt track circuits must not be operated or allowed to stand within interlocking limits except upon permission of the operator who must be advised when the movement has been made. Operator before permitting such movement must block or mark all affected switch levers.

ENGINE AND TRAIN CREWS.

661. If a signal indication, permitting a train or engine to proceed, after being accepted, is changed to a Stop-indication before it is reached, the stop must be made at once. Such occurrence must be promptly reported to the train dispatcher.

662. A train or engine delayed between signals must approach the next signal prepared to stop.

663. Unless otherwise provided, trains or engines must not pass an interlocking signal indicating stop, except as prescribed by Rule 629. Enginemen or trainmen must not proceed on hand signal, Clearance Form K, or verbal permission until after their train or engine has been brought to a stop. The movement must then be made at restricted speed.

663a. Unless otherwise provided, in automatic block signal system territory, when a train or engine has moved through the interlocking either on hand signal, Clearance Form K, verbal permission, or preceded by a flagman, it must proceed as prescribed by Rule 509 or Rule 509a to the next signal even though indication of signal ahead may be observed before reaching it.

668. When a train or engine is detained at an interlocking station, the conductor or engineman or member of the train or engine crew when authorized by the conductor or engineman must report promptly to the operator. Conductors must report to the train dispatcher any unusual detention at interlocking stations.

669. Trains or engines stopped by the operator in making a movement through an interlocking, must not move in either direction until they have received the proper signal from the operator.

670. A reverse movement within the limits of an interlocking or a forward movement after making a reverse movement, must not be made without the proper interlocking signal indication or permission from the operator.

671. While an interlocking station is closed, should a signal for an open route indicate "Stop", movements through the interlocking must be preceded by a flagman. Before proceeding, the engine-

man and trainmen must know the route is properly lined and at closed interlocking stations governing railroad crossings at grade they must protect against conflicting movements on other routes unless otherwise instructed or protected.

The facts must be reported to the train dispatcher from the first available point of communication.

671a. When a train or engine is stopped by a Stop-indication of an automatic interlocking signal and no immediate conflicting movement is evident, a member of the crew must operate the time release. If signal does not change its indication at expiration of time release interval, train or engine may then proceed on hand signal from a member of the crew if there is no train or engine on conflicting route and signals on conflicting route indicate Stop.

If a train or engine is on conflicting route, proceed hand signal must not be given until such movement is stopped, and if signals on conflicting route do not indicate Stop, proper flag protection must be provided.

672. The proceed indication of a dwarf signal permits only one train or engine to pass that signal at a time, except when two or more trains or engines are coupled.

A following train or engine must not proceed until the signal indicates stop behind the preceding train or engine and again indicates proceed.

CENTRALIZED TRAFFIC CONTROL.

675. On portions of the railroad specified by timetable, trains and engines will be governed by automatic signals and interlocking which will constitute a centralized traffic control system (CTC),

which will supersede the superiority of trains for both opposing and following movements on the same track. Train orders (except orders regarding track conditions, etc.) are not required for movements of trains and engines in CTC territory. CTC rules supersede Rule 93 in CTC territory.

NOTE. — The use of abbreviation "CTC" is authorized in referring to this system. Signs reading: "Begin CTC" and "End CTC" define the limits of this system.

Trains or engines must not enter or foul main track or re-enter main track after having cleared it except:

(a) When authorized by signal indication.
(b) At electrically locked hand-operated switches upon authority of control station.
(c) When authorized by control station to change dual control switch to hand operation.
(d) Main track hand-operated switches may be used without authority from control station when a portion of train, or cars, remain standing on main track immediately adjacent to the switch.

676. Trains or engines may occupy the main track for stated time periods and within designated working limits when verbally authorized by control station. Flag protection will not be required during the time and within the designated working limits. Track specified may be used in either direction.

When two or more trains or engines are authorized to occupy the main track within the same time and working limits, control station must inform the engineman and conductor of each train or engine of the fact and such trains and engines must move at yard speed within the designated working limits.

To hold working limits for time authorized, main track must be occupied continuously, or main track switch left open.

When a train or engine requests time and working limits, employe will state his name, occupation, location and train or engine identification. Verbal authority granted must be repeated to control station, and if correct, response "OK" will be given. Control station will make a record of the authority given, and also record when train or engine clears the main track.

677. Trains or engines must be clear of track specified by the time stated and will report to the control station when clear, except when control station authorizes by interlocking signal indication a train or engine to move out of the track limits in the same direction in which it entered, it will be considered clear when it has passed such signal indication. When additional time is required, it must be authorized by control station before expiration of previous time limit. If, in emergency, it is necessary to occupy main track beyond the time limit authorized, trains or engines must be protected in both directions as prescribed by Rule 99.

678. When stopping at a signal displaying "Stop" indication, train or engine must stop not less than 50 feet before reaching the signal.

If a train or engine overruns an interlocking signal displaying "Stop" indication, the front of the train or engine must immediately be protected as prescribed by Rule 99, and control station notified before movement is made in either direction.

After a train or engine is stopped by a "Stop" signal it must stay until authorized by signal indication to proceed, except that when signal cannot

be cleared the train or engine may be authorized by control station to proceed at restricted speed.

679. Unless otherwise provided, trains or engines may pass "Stop and proceed" signals without stopping, proceeding at restricted speed through the entire block, expecting to find a train or engine in the block, broken rail, obstruction or switch not properly lined.

680. If necessary to make reverse movement of a train or engine, such movement must be made under flag protection to the next interlocking signal, except during the time and within the working limits authorized or when proceed indication of interlocking signal is displayed for reverse movement.

681. When proceed indication of interlocking signal cannot be promptly accepted, control station must be immediately notified.

682. Control station must be advised in advance of any known condition that will delay the train or engine or prevent it from making usual speed.

683. Unless otherwise instructed, trains will maintain their authorized identity and will display markers, and, when required, classification signals.

684. Equipment which may not shunt track circuits, such as motor hand cars, tamping machines, nut runners, etc., must not enter or foul the main track nor re-enter main track after having cleared it without permission of control station. Such equipment may occupy the main track for stated time periods and within designated working limits when verbally authorized by the control station. Flag protection will not be required during the time and within the designated working limits. Unless

otherwise instructed, track specified may be used in either direction. Equipment must be clear of track specified by the time stated and employe in charge will report to control station when clear. When additional time is required, it must be authorized by control station before expiration of previous time limit. If, in emergency, it is necessary to occupy main track beyond the time limit authorized, full flag protection must be provided in both directions as prescribed by Rule 99. When employe in charge requests time and working limits, employe will state his name, occupation, location and equipment identification. Verbal authority granted must be repeated to control station, and if correct, response "OK" will be given. Control station will make a record of the authority given, and also make record of when equipment clears the main track.

685. When a failure of the CTC system occurs, trains or engines, when authorized, will operate within the limits of the inoperative territory by time-table, train orders, and related rules.

686. Such operating rules, interlocking rules, and automatic block signal system rules as are not modified by CTC rules, remain in force.

DUAL CONTROL SWITCHES.

700. Unless authorized by signal indication a movement must not be made over or through a dual control switch until it has been placed in "Hand" position. When a dual control switch is to be placed in "Hand" position, authority must be obtained from the employe controlling switch.

When authority is granted and time and working limits secured to operate a dual control switch by hand, switch may be operated as follows:

(1) Unlock switch lock.

(2) Operate dual control selector lever marked "Power" to position marked "Hand".

(3) Operate switch by hand, the same as any other switch, with lever marked "Hand Throw".

(4) After movements over switch have been completed, restore switch by hand to normal position, then lock dual control selector lever in position marked "Power" and notifiy employe controlling switch.

When necessary to operate dual control switch by hand, trainman will remain at switch until movement has been completed.

When dual control selector lever is placed in "Hand" position, all signals governing movement over the switch will indicate "Stop".

The train or engine authorized to use the switch may consider the indication of the signals suspended and make movements over the switch during the time the dual control selector lever is in "Hand" position, on hand signals of trainman stationed near the switch.

The authority granted by employe controlling switch to operate a dual control switch by hand does not authorize any part of the train or engine to move beyond the authorized limits, nor does it authorize movement over such switch except on hand signals from trainman stationed near the switch.

Before making movements over the switch, trainman must notify engineman when dual control selector lever is in "Hand" position, so that engineman will be governed by hand signals.

When dual control selector lever is restored to "Power" position, engineman must be notified so that he will then be governed by signal indication.

PERMANENT SPEED SIGNS.

710. A permanent diamond shape slow sign, with figures in black upon yellow background, designating the maximum speed of trains and engines at points specified by time-table, will be placed to the right of the track as seen from an approaching train or engine, approximately 1500 feet before reaching the point where the restriction is required, and will govern speed of trains and engines until location of restricted track or structure has been passed by entire train or engine.

Where only one set of figures is shown, it will indicate speed to be observed by all trains and engines. Where three sets of figures are shown, the top figures apply to light weight passenger trains; the middle figures apply to standard passenger trains; the bottom figures apply to freight trains, work trains and light engines. Where light weight passenger trains are not restricted, the letters AS instead of figures will be shown to indicate authorized speed is permitted.

Where the permanent speed sign covers two or more successive curves close together, a plate painted yellow and bearing one heavy black figure is attached to the right-hand side of the post below the sign to indicate the number of curves the sign covers.

TEMPORARY SPEED SIGNS.

711. REDUCE SPEED SIGN. — Black figures upon yellow background with yellow light at night.

LOCATION.—Upon the right of and adjoining the track to which it refers, a sufficient distance from the point to be protected to insure proper reduction from maximum authorized speed to the speed as shown on the sign.

INDICATION.—Approach Slow Speed Sign at not exceeding speed shown on Reduce Speed Sign.

711a. SLOW SPEED SIGN.—"Slow" in black letters upon yellow background with yellow light at night.

LOCATION.—100 feet before reaching the restricted section upon the right of and adjoining the track to which it refers.

INDICATION. — Speed between Slow Speed Sign and Resume Speed Sign must not exceed speed shown on Reduce Speed Sign.

711b. RESUME SPEED SIGN.—"Resume" in white letters on green background with green light at night.

LOCATION.—Upon the right of and adjoining the track to which it refers, and 100 feet beyond the restricted section.

INDICATION.—Resume speed after entire movement has passed this sign.

711c. When standard "Reduce Speed Signs", "Slow Speed Signs" or "Resume Speed Signs" as prescribed by Rules 711, 711a and 711b are not available, a double staff yellow flag by day and in addition a yellow light by night and a double staff green flag by day and in addition a green light by night, may be substituted.

In such cases, or when the "Reduce Speed Sign" does not designate the speed limit, speed must be reduced to not exceeding 10 miles per hour, unless a different speed is specified by train order or bulletin.

ADDITIONAL GENERAL RULES.

725. Employes must observe rules for other classes of employes that relate in any way to the proper discharge of their own duties or the safety of operation.

726. Employes affected must provide themselves with a copy and be conversant with and obey all rules and instructions applicable to their duties, contained in the following:

Safety rules, air brake rules, rules governing heating, lighting, ventilation and air-conditioning of cars; Rules and instructions for the maintenance of way and structures; (*) ICC regulations for the safe transportation of explosives and other dangerous articles; Federal and State Laws governing the handling of live stock; U. S. Safety Appliances for cars and engines and A.A.R. rules governing loading, condition and interchange of cars.

(*) Supplement No. 1 to Circular No. 182 covering ICC requirements for transportation of explosives and other dangerous articles, and Pamphlets BE 20-7 and 20-G, and supplements thereto or revisions thereof, must be obtained by employes involved who must be governed by the instructions contained therein.

727. Maintenance of Way and Signal Department employes must, train, yard and engine crews, agents, operators, and other employes will, as far as practicable, observe passing trains for defects. Train crews will also look back at the track frequently to

see if damage is being done by parts of equipment dragging. Should there be any indication of conditions endangering the train, they must take such action for its protection as may be practicable.

Employes observing such defects as hot journals, brake rigging down, swinging car doors, protruding objects, lading shifted over side or end of car, and brakes sticking, will signal crews of such trains, calling attention to dangerous conditions by signals shown below:

Hot journal (hot box) Broken wheel Defective truck Dragging brake connection Lading shifted over side or end of car Protruding object Swinging car door or any other dangerous condition	STOP SIGNAL
Brakes sticking	By day —Hands shoved in sliding motion out from body By night—Same signal with lantern

If a dangerous condition is observed and it is impossible to communicate signal to the crew on the train, the train dispatcher must be notified as quickly as possible.

If nothing irregular is noted, they will give proceed signal to the rear of passing train.

When meeting or passing trains and passing open communicating offices, signal stations, interlocking stations, drawbridges, or other stations, manually protected public crossings, and points where trackmen, bridgemen, or other employes are working, train and engine crews on moving trains must be on the lookout for signals, and, when practicable, exchange signals.

When practicable, a trainman must be stationed on the rear of train in a position to give or receive signals, as follows:

When meeting or passing trains on two or more tracks;

When meeting or passing trains on sidings;

When passing manual block, train order or interlocking stations;

When rear car is an observation, business or closed end car, trainman must be on the front platform of the rear car or on platform of the car next ahead.

When train is in siding or any other track to meet or to be passed by train, or trains, the crew of such train must, when practicable, stay in position to observe the moving train and give the prescribed signal of any dangerous condition.

To permit running inspection when pulling out of yards, terminals, or inspection points, trains must not exceed speed of ten miles per hour until the train has run its length.

729. Switches must be lined for the dead rails over track scales when scales are not in use.

Engines must not be operated over track scales, except on the dead rails.

730. In switching, when it is necessary to move cars that are being loaded or unloaded, or when such cars are liable to be struck by other cars, all persons working in or about such cars must first be notified and required to leave before the cars are moved; vehicles and other obstructions must be clear of cars, pipe connections to tank cars removed and the contents of cars properly trimmed to prevent damage. When such cars are moved

they must be returned to their original location unless otherwise instructed.

731. Employes must report for duty at the required time, and those in train service will assist in making up their trains when necessary.

732. The doors and hopper bottoms of empty cars in freight trains must be closed and secured. The doors of loaded cars must be closed, secured and sealed except when left open for proper ventilation.

733. Train and engine crews must, so far as practicable, observe whether public crossings at grade are properly protected. If gates, where provided, are not lowered, or if crossing watchmen are not in sight, the fact must be promptly reported to the train dispatcher.

734. Train employes must not permit unauthorized persons to solicit business or distribute advertising matter, nor beggars to solicit on the train.

735. When switching rear ends of trains at stations or in yards, if the lighted markers intercept the view of hand signals given to the engineman and fireman of the switching engine, the markers may be removed or extinguished.

736. When trains are ready for the reception of passengers, trainmen must take positions where they can best direct and assist them. While passengers are boarding trains frequent announcements necessary for their information and guidance must be made by trainmen. Before starting from initial station announcement must be made in each car, except parlor and sleeping cars, dining, grill and other

dining department cars, the destination of the train thus: "This train is for———, the next station stop is———".

On departing from other stations, announce: "The next station stop is———," repeating the name of the station. When approaching a station at which the train is to stop, announce: "This station is———," repeating the name of the station. If the next station is a junction point, add to the station announcement information for changing cars and the principal stations on the connecting routes.

Passenger trainmen should exercise care in making announcements over the train announcing system, using a clear tone of voice and good diction. Microphones should be handled in accordance with instructions. They should avoid announcements that are mumbled and cannot be understood.

When a train carrying passengers makes a stop, other than a station stop, trainmen must announce: "This is not the station stop".

If cars do not match up with station platform, vestibule doors and traps and platform gates should remain closed, and passengers directed to walk through cars to where they can alight on station platform.

Announcements in parlor and sleeping cars, dining, grill, and other dining department cars will be made by the attendants in charge of such cars.

736a. Passenger cars are equipped with diaphragm curtains which extend from one car to the other on both sides of the opening. These curtains provide protection for employes and passengers passing between cars and must be in place while trains are moving on the road. Passenger conductors

must know that the diaphragm curtains are in proper position before leaving originating terminals and en route.

In every case where passenger cars are separated, either on the road, at stations or in yards, the employe who makes the cut must know that the diaphragm curtains have been unhooked before the cars are separated.

Report must be made promptly to the superintendent when a vestibule curtain is damaged, giving number of car and details showing the manner in which the damage occurred.

737. Public crossings at grade must not be obstructed unnecessarily, and in no case over 5 minutes or when it will prevent passengers from boarding or leaving trains. When necessary to separate a train to open a crossing the cars should be kept at least 15 feet from either side of the crossing when practicable. Before a movement is made to recouple, the crossing must be protected. When placing cars on sidings, yard, or other tracks adjacent to main tracks where there is a public crossing at grade, such cars should be placed as far from the crossing as conditions will permit.

738. At public crossings at grade protected by automatic warning devices, when track circuits are occupied by switching movements and for more than 5 minutes by other trains, engines or cars, a member of the crew must at once protect such crossing for other movements, and if no other movements, authorize highway traffic to use the crossing while the warning device is operating.

Movements on tracks (other than main tracks) over public and private crossings at grade protected by automatic crossing devices, or from such tracks

to main track where switch in main track is in close proximity to such crossing, must first be protected as prescribed by the rules.

Main track switch must be lined for the siding or other track involved before passing post marked "**C.C.**" which indicates beginning of track circuit which operates highway warning device.

On single track after a train or engine has passed over a public or private crossing at grade protected by automatic warning device, reverse movement over the crossing must not be made within the limits of track circuits governing the automatic warning device until protection is first provided as prescribed by the rules, unless warning device is known to be operating for crossing involved.

Where gates are provided, trainmen, motor hand car operators or employe in charge of other rail movements must operate the gates at unattended grade crossings. At highway grade crossings protected by automatic gates, all rail movements not equipped to operate automatic gates must not pass over such crossing until gates have been operated.

738a. Combined automatic crossing gates and flashing light signals are in use as indicated in the time-table. They are equipped for operation of movements in both directions and detailed instructions for their operation are posted in the cases at the crossings.

To avoid delay to highway traffic when main tracks are occupied for switching or to provide for movement on other tracks or abnormal movement incident to switching, manually operated switches have been installed in cases equipped with switch locks and must be used as necessary to operate crossing gates and flashing light signals. The

door of these cases must be kept open until the movement is completed and then closed and locked at all times when not in use.

1. Case marked "TEST" to be used for operation of gates for switching or abnormal movements.

2. Case or cases, one for each track, marked with proper track number, to be used to raise the gates when the track section is occupied by standing equipment.

The operation of the switch, as directed for the track occupied, will raise the gates providing there are no movements on the other track. After the gates have been raised under such conditions no movement over the crossing on the track involved should be permitted until the gates are in the "DOWN" position, which may be effected by restoring the switch to its normal position.

The gates must be raised as soon as practicable after it is known that an engine or cars are occupying a controlling track section and will not be moved promptly.

The operation of these buttons will not affect the automatic control for through main track movements. All other train movements must approach the crossing at restricted speed and enginemen or trainmen on leading car or cars pushed must know that the gates are down and signals flashing before obstructing the crossing.

738b. At highway grade crossings, equipped with flashing light signals or with automatic crossing gates and flashing light signals, where these crossings are so equipped, the following instructions must be observed as required:

To avoid unnecessary operation of flashing light signals and delay to highway traffic, marker posts

are installed to indicate end of circuit where trains may be stopped or cars may be left for switching movements. Marker posts will be painted with alternate black and white stripes and with letters to indicate the action required as outlined below:

Letter	Action Required
(1) —	End of circuit — Standing equipment keep clear.
(2) P	Stop here — Operate manual switch as directed. (Flashing light signals must be operated by manual switch and signals continued in operation until movement clears the crossing. Directions for operation posted in case.)
(3) X	Standing equipment must keep clear. If a movement is to be made over crossing, pass marker not more than 30 feet which will start operation of flashing light signals; after 30 seconds proceed over crossing to clear other marker.
(4) S W	Where cars must be left on track circuit approaching crossing to do switching, a movement over the crossing will stop signals from flashing. On return move approach crossing to a point where signals start flashing and when highway traffic is stopped clear of crossing, proceed at restricted speed. When movements have been made which cause the flashing light signals to stop operating, all following movements must be made at restricted speed and it must be known that signals are flashing or crossing must be protected as prescribed by the rules.

739. When flying switches are made, extra precautions must be exercised to avoid injuries to employes and damage to equipment or contents of cars. Before making the switch it must be known that track is clear and that switches and brakes are in working order. When possible, engine must be run on straight track. Such movement must not be made with cars containing livestock, explosives, inflammable liquids, poisons, compressed gases, or cars occupied by persons, except employes on duty, or to tracks occupied by such cars, or to short tracks leading to trestle or building, or over interlocked, dual control, spring and electrically or mechanically locked switches.

741. Train and engine employes must inspect their trains for possible defects of the running gear, brake and draft rigging, giving special attention to hot journals, sticking brakes and sliding wheels as often and as closely as practicable while moving or standing.

745. The only persons allowed to ride on engines, front platform or engineman's compartment of MU or RDC equipment, or rear platforms of cars without permits issued by the proper authority are the general officers of the operating department, division officers and trainmen in the discharge of their duties; also employes learning the road, holding written authority by the superintendent. Not more than two persons holding engine permits will be allowed to ride on an engine or in the engineman's compartment of an MU or RDC car at one time. No one whose duties do not require it will be permitted to ride on the engineman's side. Enginemen must not permit trainmen to remain on engines when duty requires them elsewhere.

746. On trains of MU and RDC equipment the body door at the front end of the head car must be kept closed and curtain drawn across window in this door whenever such cars are occupied by revenue passengers. The rear door of engines when attached to a train must be kept closed but not locked.

747. Except when switching in freight service, when light movements are made with electric and Diesel electric engines equipped with double-end control, engineman and fireman must be in forward cab in direction that movement is made.

When light movements of two or more DER-2 Diesel electric engine units with B unit trailing are to make reverse movement so that B unit is pushed, a member of engine or train crew must be at the leading end of B unit to provide control.

On moving electric and Diesel electric operated freight trains the fireman must not leave forward cab of engine unless authorized by the engineman, who must sound whistle signal 14 (s) to indicate that head trainman must immediately come forward and comply with Rule 34 before fireman leaves and until return of fireman.

On multiple unit Diesel electric engines in high speed main line through passenger service, a fireman (helper) shall be in the cab at all times when the train is in motion, and where only one fireman is assigned, the following regulations will apply:

While train is stationary during regular or unscheduled stops and time permits, power plants, etc., should be given inspection and attention as required by operating instructions.

When alarm bells ring and train is in motion, the following instructions govern:

1. If red warning light shows, indicating high engine temperature, attempt to reduce temperature and reach next regular stop by extended drifting periods. When drifting is not feasible, stop, investigate and take necessary action.

2. If green warning light shows, indicating low lubricating oil pressure, at next stop investigate and take necessary action.

3. If white warning light shows, indicating steam generator flame out, when temperature is 32 degrees above zero or higher, at next stop investigate and take necessary action; when temperature is lower than 32 degrees, stop at once and take necessary action.

4. If no warning light shows in cab panels indicating ground relay is tripped, at next stop investigate and take necessary action.

NOTE. — When continuing to next stop with alarm bells ringing, be alert for lights indicating other troubles showing in the warning panels.

748. When necessary to operate a multiple unit train, or two or more electric or Diesel electric engines coupled working as a unit, from other than the leading car, or engine, conductor and engineman must confer and arrange for safe movement at restricted speed to the first point where practicable to set out defective equipment; while this movement is being made, the conductor or fireman must take a position on the leading car or engine where he can observe the track and signals and govern movement by hand signals to the engineman.

749. When towing dead or unserviceable Diesel-electric engines in freight trains, three such engines, properly distributed, not more than two to be coupled together, shall be the maximum number handled in one train. There shall not be less than five cars between the engine hauling train and the first dead engine and between any two of the dead engines.

750. Applicants and employes will be required to comply with "Instructions governing employment, examinations of vision, color sense and hearing," contained in Vice President's booklet revised July 1, 1948, or supplements thereto.

When glasses are required for distant vision, as specified in the standard of acuteness of vision or are renewed, the oculist's prescription must be furnished the examiner. Persons allowed glasses for distant vision will be required to have at least two pair and to use each pair during the examination. If the aid of glasses is required to pass the examination, their use is compulsory while on duty and when glasses are required for distant vision employes are required to have two pair with them while on duty.

The use of glasses with colored lenses by employes whose duties require them to distinguish the aspect or color of signals is prohibited.

Employes promoted or transferred to positions requiring ability to observe or know the color of signals must pass a satisfactory examination at the time of the promotion or transfer.

SPECIAL RULES.

TRAIN DISPATCHERS.

760. Train dispatchers report to and receive their instructions from the superintendent or chief train dispatcher or from such officer as may be designated. They will issue train orders for the movement of trains in the name of the superintendent, transmitting and recording train orders as prescribed by the rules in accordance with the rules for movement by train order.

761. Train dispatchers must report immediately to the chief train dispatcher any irregularity relating to the movement of trains or the handling and execution of train orders.

762. They should bear in mind that many matters clear to them may not be fully understood by operators, conductors, enginemen and others, and give instructions in such a manner that they will not be misunderstood. Being perhaps more familiar with existing conditions than some others, it is the dispatchers' duty to take the initiative so far as lies within their power; see that trains are moved safely, anticipating dangerous conditions, and avoid issuing messages or unsafe combinations of train orders that might cause an accident, due to confusion or misunderstanding.

They will make the various records required and observe special instructions.

763. They must familiarize themselves with conditions existing on territory handled by making frequent trips over it. When issuing restricting orders, the conditions of the surroundings, such as

weather, grade and view, must be taken into consideration.

764. They must require operators to report trains promptly.

765. Before giving an extra train its orders, they will enter it on the train sheet, and carefully examine such sheet for opposing extra trains and work extras.

When practicable, they will run extra trains to their known destination; avoiding, for temporary convenience, short running orders.

766. They must not extend the limits or time of a work extra, but must annul its former order and issue another, as may be necessary under later conditions.

767. Before being relieved, they must write, in ink, in the train order book, a transfer of all orders not executed. They must see that such orders and all information pertaining thereto are understood by the relieving dispatcher, who must acquaint himself with instructions, the position of trains and contents of the train order book, and acknowledge same by signing his name in the train order book.

YARDMASTERS.

770. Yardmasters, unless otherwise directed, report to and receive instructions from the superintendent or his representative. Within assigned districts and as directed they have charge of yards, of employes, movement of trains and engines and distribution and movement of cars therein, unless otherwise provided. Trick yardmasters are governed by these same instructions.

They must be familiar with instructions relative to handling of explosives, refrigeration, ventilation, live stock, and of perishable and other freight.

They must have on file and be familiar with General Car Order and Home Route Instructions, special car orders and instructions issued by General Superintendent of Transportation pertaining to the handling or movement of freight equipment. They will be responsible for compliance of instructions.

STATION MASTERS.

775. Station masters report to and receive their instructions from the superintendent or his representative. They have charge of the passenger station where located and, unless otherwise provided, of the persons employed therein.

776. They must see that the station and various apartments are kept in proper and sanitary condition; preserve order in and about the station and around sleeping cars; attend courteously to the comfort and wants of passengers; that passengers are directed to the proper trains and that proper information regarding time of arrival and departure of trains is shown upon bulletin boards provided for the purpose. At stations equipped with intertrack fences they will be responsible for keeping the gates of these fences closed and locked or properly protected when not in use, when under their jurisdiction. Assistant station masters in the districts assigned them are governed by these same instructions.

GENERAL RULES FOR CONDUCTORS.

780. Conductors report to and receive their instructions from the superintendent or his representative and will obey the instructions of train and crew dispatchers, station masters, station agents, and yardmasters in their respective jurisdiction, and conform to the instructions issued by the heads of other departments.

Conductors will have general charge of trains to which they are assigned, and all persons employed thereon.

781. Conductors will be responsible for the movement, safety and proper care of their respective trains in strict accordance with the rules, special instructions and train orders, and for the faithful and prompt performance of duties by the trainmen.

782. Conductors must see that their trains are provided with proper tools and equipment at all times; know that the cars in their trains have been inspected, and that the brakes are in proper working order and that the prescribed signals are displayed.

Conductors must not start their trains from inspection points until the inspectors have given notice that their work is finished. Conductors are responsible for making the required tests when car inspectors are not available.

783. Conductors must see that their trainmen remain with and protect their trains at terminals until cars are clear of the main track or taken in charge by the relieving train crew or yardmen. Markers must not be removed until cars are placed on storage tracks or taken in charge by the relieving train crew or yardmen.

784. When repairs are made to foreign cars, a report on prescribed form must be made.

785. They must be familiar with and have copy of General Car Order and Home Route Instructions, and instructions issued by General Superintendent of Transportation pertaining to the movement or handling of freight equipment and see that they are complied with.

PASSENGER CONDUCTORS.

790. Passenger conductors must not permit intoxicated or disorderly persons to get on their trains, nor persons mentally incompetent unless accompanied by an attendant. They must not permit obscene or profane language, nor interference or annoyance of other passengers or other misconduct.

Blind persons without escort or guide, who establish their ability to travel alone, may purchase tickets and will be given such assistance by train employes as may be necessary to their safety in getting on or off trains.

Conductors must pass through their trains at frequent intervals to attend to the wants of passengers and to see that trainmen properly perform their duties.

792. If necessary to protect passengers from any person who is noisy, disorderly, intoxicated or otherwise offensive, a conductor must be careful to use no more force than is absolutely necessary. He must maintain a dignified self-control, and if the comfort and safety of passengers require, remove the offending person to the baggage car or other suitable place of detention, understanding

that this does not constitute an arrest, and that the person may be allowed to depart from the train or may be arrested by a railroad or regular police officer.

He must eject only at a station where an agent or police officer is on duty, and where the ejected person will not be exposed to inclement weather.

A conductor must never eject a child of tender years or a person in a feeble or helpless condition. The names of witnesses having information regarding incidents subject to this rule should be obtained and sent to the superintendent with a special report giving all particulars.

793. Passenger conductors must keep themselves thoroughly posted as to connections and the time of connecting roads, and have in their possession when on duty a copy of the latest public folder and be prepared to inform passengers as to routes, connections and through coach, parlor and sleeping car arrangements.

794. When examining tickets passenger conductors must notify passengers destined to points on branch or connecting lines where to change cars. When late they must wire agents at junctions the number of passengers for connecting roads and divisions.

795. At terminal stations, passenger conductors must report to the car inspector or repairer any defects of the cars in their trains, and any imperfect action of the air brakes or other appliances noticed during the trip. They must also notify the inspectors or repairers at intermediate stations of such defects or imperfect action, and if necessary give them an opportunity to repair.

796. Passenger conductors must know that at all times a trainman is in position in the train with flagmen's signals ready for use, that he goes back to the rear promptly when safety or the rules require it, and that the next trainman takes his place on the train promptly.

797. Passenger conductor's duties are of the most delicate and responsible character, and require unusual tact and courtesy. The safety of their trains and passengers and the reputation of the railroad are dependent upon their discretion and care.

TICKET COLLECTORS, TRAIN BAGGAGEMEN, PASSENGER TRAINMEN, FREIGHT TRAINMEN AND YARD BRAKEMEN.

800. Ticket collectors, train baggagemen, passenger trainmen, freight trainmen and yard brakemen report to and receive instructions from the superintendent or his representative. They must obey the instructions of the conductor; also those of train and crew dispatchers, station masters, station agents and yardmasters within their respective jurisdictions.

Ticket collectors will assist the conductor in the collection of transportation and comply with Rules 793 and 794 and when necessary must perform duties of trainmen.

801. Train baggagemen must receive, take care of and correctly deliver baggage, mail, express, etc., placed in their charge. They must carry a supply of necessary reports, exercise care to make them out properly and forward them promptly at the end of the run.

802. Train baggagemen must give proper attention to the custody and delivery of United States and train mail, reporting any irregularities promptly to the train dispatcher. When mail is delivered from moving trains it must be thrown off at designated places.

Before putting off any packages from moving trains they will be sure that such packages will clear the train, and that there are no persons or objects in the way that might be struck.

803. Train baggagemen must remain in the baggage car during the entire trip, except when duties require them elsewhere, and will not leave car at the end of trip until all baggage and other matter is properly disposed of or transferred to relieving train baggageman.

If necessary to leave the baggage car temporarily they must close and lock all doors or know that it is properly protected.

804. Train baggagemen must, when necessary, perform the duties of passenger trainmen. They must not allow passengers to ride in the baggage car unless authorized.

805. Train baggagemen must not accept anything for transportation, except company business.

806. Passenger trainmen must keep car seats turned, facing them toward the head of the train, except when proper to allow passengers the use of double seats.

807. Passenger trainmen must lock the doors of toilets in coaches when approaching or standing at important stations or terminals. They must promptly unlock them after leaving such points.

Proper judgment must be used in cases of emergency.

808. When cars are left at points where no provisions are made for their care, they must see that windows are closed, doors locked and heating, lighting, ventilating and air conditioning apparatus is properly cared for.

809. Passenger trainmen must see that proper heating, ventilation, air conditioning and illumination are provided in each occupied coach as conditions warrant.

Passenger trainmen must frequently pass through the cars to see if any services are required for the comfort and safety of passengers.

When practicable, necessary assistance must be extended to passengers boarding and alighting from trains, particularly women with small children or hand baggage, elderly or invalid persons.

810. Trainmen and yard brakemen are responsible for the display of train signals as required, the handling of switches, the coupling or uncoupling of cars and engines when necessary or so instructed, the manipulation of brakes, and for assisting the conductor or engineman in all requisites for the prompt and safe movement of their train or engine.

FREIGHT AND YARD CONDUCTORS.

825. Conductors must have the proper authority for movement of each car in the train.

826. Conductors must not handle a car which is found to be overloaded or improperly loaded or not in condition to run safely and report cars in such condition to the train dispatcher promptly.

827. Conductors must, when bad order cars are set out of the train, report the fact to the train dispatcher promptly, advising nature of defect, where waybill or manifest was left and note on waybill or manifest the point at which car was left.

828. Conductors must carefully check with the waybills (in conjunction with station agents if possible) all freight loaded and unloaded, and make a record of freight over, short or in bad order.

When necessary to transfer freight from one car to another they must record the transfer and number and initials of the car to which it is transferred on face of waybill.

829. Yard conductors must know that proper routes are lined up and proper protection of all movements is provided to avoid any damage, or injuries. Both road and yard conductors are responsible when handling derricks as per Rule S-106 to know that the derrick is properly secured before moving and before permitting trains on adjacent tracks to pass so as to avoid the derrick swinging and sideswiping other passing trains.

SWITCH TENDERS AND SWITCHMEN.

830. Switch tenders and switchmen report to and receive instructions from the trainmaster or his representative. They must obey the instructions of station masters, yardmasters, crew dispatchers and train dispatchers within their jurisdiction. It is their duty to operate the switches as instructed for trains and engines using them; to know the switches are properly lined, locked or hooks in place and in good condition and clear of snow or other obstructions, and promptly report defects.

831. A switch tender or switchman to be relieved by another must not leave his post until relieved, and the one going off duty must inform the one coming on, of trains due which have not passed and any other information necessary for his guidance.

ROAD FOREMEN OF ENGINES.

832. Road foremen of engines will conduct the prescribed mechanical examinations of enginemen and firemen for promotion. In the absence of the trainmaster, the road foreman of engines will, when necessary, exercise the authority of the trainmaster.

ENGINEMEN.

834. Enginemen report to and receive instructions from the superintendent or his representative. They must obey the instructions of the road foreman of engines and also station agents, yardmasters, station masters and train and engine dispatchers within their jurisdiction. They must obey the conductor in charge of their train as to general management of their train, unless by so doing they endanger the safety of the train or violate the rules. In mechanical matters they must comply with the instructions of the master mechanic, and within engine house territory they will comply with instructions of the engine house foreman or his representative.

835. Enginemen are responsible for the proper management of the engines in their charge, and

must know that the engine is furnished with the necessary signals and supplies. If any part of the engine machinery requires attention, the engineman must reduce speed or stop so that the observance of all signals and the safety of the train movement may be assured.

836. When there is no conductor, or when the conductor is incapacitated, the engineman will, unless otherwise directed, have charge of the train and will be governed by the rules prescribed for conductors.

837. Enginemen are responsible for the performance of duty by firemen, and will when necessary instruct them in such duties.

The fireman, when competent, may handle the engine under the supervision of the engineman, the engineman being responsible. The phrase "when competent" means that firemen who have passed all of their examinations for promotion to engineman and who, in addition, have been certified by a road foreman of engines in engine operation, may operate either No. 3 or No. 4 service under the personal supervision of the engineman and then only when the engineman in charge of the engine is willing to assume responsibility.

Firemen with one year's actual service as a fireman who have passed a satisfactory examination given by a road foreman of engines and have been issued a certificate to that effect may operate engines in freight yard and local freight service when authorized by the engineman, the engineman being responsible. Firemen with less than one year's actual service are not allowed to handle engines.

838. Enginemen must not leave their engines or RDC cars while on duty except in case of necessity, and then the fireman must be left in charge. When the engine is unattended, whether on the road, siding, other track or at the engine house, the independent brake must be left in application position and brakes applied; on an electric engine the main oil circuit breaker or main D.C. knife switch must be opened, master controller handle in the "off" position and hand brake applied and, in addition, the wheels must be blocked where conditions require.

When leaving Diesel-electric engines at end of trip, leave engine brake in applied position, leave control push button "in," remove reverse handle and place on top of master controller, pull out all other push buttons in master controller, except lights as required, apply hand brake on each unit. In cold weather guard against freezing.

NOTE. — The same requirements apply to Rail Diesel type cars except the engine brake must be applied and the hand brake applied on each unit regardless of the place.

839. Enginemen must exercise care in starting and stopping the train, and in moving and coupling cars, so as to avoid disturbance or injury to occupants and damage to property.

840. The whistle must not be sounded while passing or being passed by a passenger train, except in case of emergency or as prescribed by the rules.

841. Enginemen must, at the end of each trip, make written report on prescribed form of repairs necessary to the engine.

842. When a train has more than one engine the requirements of the rules apply alike to the engineman of each engine, but the use of the engine bell, whistle and the air brake, except in emergency, will be limited to the leading engine.

843. An engineman must not perform service on territory over which he has qualified on the physical characteristics if, after qualifying, a period of 6 months has elapsed during which no service has been performed thereon. The period of renewal may be extended or restricted by the superintendent.

FIREMEN.

850. Firemen report to and receive instructions from the superintendent or his representative and must obey the instructions of station agents, yardmasters, stationmasters and train and engine dispatchers within their jurisdiction. They must obey the conductor in charge of the train unless by so doing they endanger the safety of the train or violate the rules. While assigned to an engine they are under the direction of and must obey instructions of the engineman.

Firemen must take charge of the engine in the absence of the engineman, and not leave it until he returns, nor allow unauthorized persons thereon; and must not move it, unless in emergency they are so instructed by the conductor or other authority. If the engineman is incapacitated, the fireman must stop the engine and report to the conductor.

851. While engine is moving firemen must keep a constant lookout when not necessarily engaged in other duties, and give immediate notice to engine-

man of any signals or other conditions affecting the safety or movement of their train. Firemen are responsible for assisting the engineman in all things requisite for the safe and prompt movement of their train or engine.

OPERATORS AND LEVERMEN.

860. Operators and levermen report to and receive instructions from the superintendent or his representative. They must obey instructions of chief train dispatcher, train dispatchers or train directors, also must comply with the instructions of other departments in their jurisdiction. When on duty they are responsible for the handling and delivery of train orders and telegrams to the persons addressed, for arranging the use of blocks, tracks, interlocking, switches, highway crossing devices and signals and for the prompt and safe movement of trains in accordance with the rules, train orders and special instructions.

Operators handling commercial business must conform to the rules and regulations of the Western Union Telegraph Company as issued and instructed by the Superintendent of Communication.

861. When relieved, operators must make written transfer on prescribed form of all train orders and all other forms in effect and any other information required on the form. The relieving operator must compare the train order numbers with those shown on the transfer and note the time and sign the transfer.

The office copies of train orders, Clearance Form A, Register Card Form D and M.H.C. Forms and block records must be filed and preserved as required by law or special instructions.

862. Operators must make such wire connections on switchboards and wire tests as directed by the railroad wire chief and obey his instructions promptly. They must not, except in emergency, make any wire connections unless directed, and must, when called in on the circuit by a wire chief, remain cut in until released by him.

At offices where Western Union wires enter for testing, they must make such wire connections on switchboards and wire tests as requested by Western Union wire chiefs or maintenance forces.

863. Operators must observe all interruptions to circuits and make frequent examinations of switchboards, relays, keys, lightning arresters and other devices, reporting promptly any trouble or abnormal conditions to the wire chief or train dispatcher.

864. Operators must report the weather as required, and in case of sudden change, heavy storm, or fog, promptly advise the train dispatcher.

They must notify the train dispatcher immediately if their relief fails to report at the prescribed time.

STATION AGENTS.

875. Station agents report to and receive their instructions from the superintendent or his representative. They must comply with instructions from officers of other departments on matters pertaining to those departments.

They will have charge of the railroad's business, property and station employes at their respective

stations and must preserve order in and about the station, that the buildings and grounds are kept in proper condition, and give necessary attention to fire protection. They must see that no unauthorized person has access to the ticket and freight offices, baggage and freight rooms.

They must have on file and be familiar with General Car Order and Home Route Instructions, special car orders and instructions issued by General Superintendent of Transportation pertaining to the handling or movement of freight equipment. They will be responsible for compliance of instructions.

876. Station agents must see that all freight which requires shelter is promptly placed in freight house or in cars. Freight houses must be locked, and cars containing freight, which can be closed, must be sealed or locked at all times, except when the agent or other authorized person is in immediate charge thereof. Seals must be kept in a secure place and the required seal records made. Freight, baggage or express must not be left between main tracks, nor within 6 feet of the edge of main track platform. Unless otherwise provided, they are responsible for keeping gates in intertrack fences closed and locked when not in use, also mail, baggage and express trucks left standing on station platforms must be chained.

877. Station agents will attend to the sale of tickets and to the receiving, delivering and forwarding of baggage and freight and collections for the same; see that cars are promptly loaded or unloaded and forwarded; keep the accounts, and make reports and remittances, in the manner prescribed.

878. L.C.L. freight unloaded must be checked by the agent or his representative. They must have waybills in proper order so that freight to be loaded can be checked therefrom; the apparent condition noted, and any over, short or in bad order reported in the manner prescribed.

879. Station agents must not permit advertisements to be posted on the Company's premises except those duly authorized.

They will post in a conspicuous place, the public time-tables, tariffs and other matter issued by the traffic department.

They must know that the Company's advertising matter is properly displayed and of the issue in effect.

880. Station agents must see that ticket and freight offices and baggage rooms are open at the prescribed time.

881. Station agents must attend to the handling of United States mail between mail cars and post-offices when within the legal limit, and at junctions, to the transfer of mail, unless otherwise provided for. Mail pouches and parcel post packages must be protected. They will notify postmasters of time-table changes and advise the superintendent of changes in post-office locations.

882. Station agents must, unless otherwise provided, designate the places where vehicles shall be allowed to stand at the station, and where the persons in charge thereof, hotel porters and other authorized solicitors shall remain while engaged in their duties on railroad property.

883. Skids, trucks and portable scales, when not in use, should be placed in baggage room or warehouse; if necessary to leave them on platforms, they should be lined up at the end or in the rear of station building, and must be locked or otherwise secured, with the handles fastened in a nearly vertical position.

FOREMEN CAR INSPECTORS.

885. Foremen car inspectors report to and receive instructions from the master mechanic or his representative. They are responsible for the performance of duty by car inspectors and of others assigned to their jurisdiction, and will when necessary instruct them in such duties. They must know that all inspectors under their jurisdiction have passed the required examinations.

CAR INSPECTORS.

890. Car inspectors report to and receive instructions from the foreman; if no foreman has jurisdiction, they will receive instructions from the master mechanic or his representative. They must be familiar with all clearances, and not allow to go forward a car which exceeds the clearance dimensions or is in an unsafe condition. They must be familiar with the rules of the Operating Department, the A.A.R. rules and special instructions pertaining to their duties.

CROSSING WATCHMEN.

895. Crossing watchmen report to and receive instructions from the superintendent or his representative. They must be on the lookout at all times

for movements in either direction on the tracks, and must not depend upon the schedules of trains nor on warning appliance for warning of approaching trains.

The following signals will be used by crossing watchmen:

Day signals	A stop sign. A red flag. Torpedoes and fusees.
Night signals	A four lens lamp. One four lens lamp for each gate. A red light. Torpedoes and fusees.

896. When crossing watchmen go off duty lighted lamps must be left on gates that are to be operated by trainmen.

897. Where crossing gates are provided, unless otherwise provided, crossing gate lamp will be attached to each gate arm at night showing red toward the highway and white toward the track. The gates must be completely lowered on both sides of track in ample time before approaching rail movement reaches the crossing and kept lowered until such rail movement has passed the crossing and until the crossing watchman is sure that no other rail movement is approaching.

897a. Crossing watchmen will not permit unauthorized persons to enter or loiter in or about crossing cabins.

898. At public crossings not protected by gates, when a rail movement is approaching, crossing watchmen must place themselves in the middle of

the highway near the track, and remain there until it is safe for vehicles and pedestrians to cross the track. By day they will display a stop sign, holding it in upright position so that the word "STOP" will plainly appear to any person approaching on the highway. By night, or when stop sign cannot be plainly seen, they will display a four lens lamp, swinging it horizontally across the highway, red lenses toward highway traffic, white lenses toward track. When prescribed signals are not available, a red hand signal will be used. When protecting crossings, employes must not give hand, flag or lamp signal governing train, engine or motor hand car movements, except to prevent accident.

898a. Crossing watchmen must observe passing trains for defects, and should there be any dangerous condition noted they must, when practicable, exchange hand signals with train crew and take such other action prescribed by Rule 727. They must keep the flangeway clear of ice, snow, dirt and other obstructions; also keep crossing cabins in clean and tidy condition.

When switching movements are being made over the crossing they must be especially careful and cooperate with the crew switching for the safe movement of pedestrians or vehicles over the track as prescribed by Rules 737 and 738. If the track at or near the crossing is obstructed and may affect rail movements they will take prompt and necessary action for full protection for rail movement involved.

899. When crossing gates or other crossing warning devices are out of order, the crossing watchman must, until repairs have been made, protect the crossing as prescribed by Rule 898.

PASSENGER SERVICE.

900. Wood coaches, combination or mail cars in passenger service must not be placed between steel cars or between steel cars and the engine, but may be hauled in the same train behind steel cars, except that wood cars must not, unless to meet some unforeseen traffic emergency, be substituted for steel cars or placed in trains of which the normal make up is entirely of steel equipment.

901. Wood express, baggage or other cars (except mail cars) not occupied by passengers may be handled in passenger service between steel cars or between steel cars and the engine, except in trains of which the normal make up is entirely of steel equipment.

902. Shipments of dangerous articles which, under the Interstate Commerce Commission Regulations for the Transportation of Explosives and Other Dangerous Articles by Express Service, and which, under individual carriers regulations, may be transported as baggage on passenger trains, must be packed, marked and labeled as prescribed for express shipments. Such shipments must not be transported or carried in that part of any car used for the transportation of passengers.

903. Only one news agent will be allowed on a train and he must wear the uniform adopted by the news company, approved by the proper authority. News agents must be clean, neat and polite, and while on duty must comply with the instructions of the conductor.

News agents must not be permitted to deposit articles for sale on the car seats, or in the laps of, or importune or annoy passengers, but may an-

nounce four times in a low tone, while passing through each car, the articles for sale, and will not pass through or work a train more than once in every thirty minutes except to meet special requests of passengers.

They shall carry with them only one trunk, which must be placed in the baggage car, or in other location designated by the conductor.

They must not be permitted to use toilets or other facilities in parlor and sleeping cars.

904. Persons authorized to sell articles on trains must leave the train one minute or more before its departing time, unless accompanying the train. They must not obstruct exits or aisles with their articles while passengers are boarding or leaving train.

905. Extra equipment, or cars reserved for special parties, must be locked until arrival of special parties. No change in arrangement for extra or special equipment must be made unless authorized by proper authority.

906. When necessary to make sections of a train en route, or when coaches are cut off en route, notice must be given to passengers in all cars to transfer their belongings. Trainmen in charge of cars cut off en route will see that articles left by passengers are transferred to cars going through, and protected until taken by owner.

907. A mail train must not leave mail which is in the process of being loaded on the car, or which the conductor or trainman has information is being trucked from vehicles or some part of the station to cars.

Articles forwarded by parcel post labelel "fragile" should be handled with care. When enclosed in sacks, pouches or packages, there will be attached to the label holder or cord fastener a shipping tag reading "Fragile, Handle with Care." Mail bearing these red tags must not be placed beneath other mail.

When U. S. mail pouches are delivered to baggage car in a damaged condition by employes of the railway mail service, so that the contents will not be properly protected, train baggagemen will decline to accept.

Train baggagemen should handle parcel post packages in pouches, sacks or loose.

908. Train employes must not occupy seats with passengers, nor enter into conversation with them or other employes further than is required in the discharge of their duty, but will contribute as far as possible to the convenience and comfort of passengers, passing through their trains at frequent intervals, and give particular assistance to children who are unattended, and to persons who are ill, infirm, inexperienced or otherwise unable to care for themselves.

Sorting of tickets and compiling of reports must not be permitted to interfere with other prescribed duties.

909. Passengers must be provided with seats when practicable, and no one allowed to occupy more than a single seat to the exclusion of others. When necessary to use a deadhead parlor or sleeping car for revenue coach passengers for whom no seats in coaches are available, conductors will make prompt report to train dispatcher.

Hand baggage or bundles must not be allowed in aisles of cars; nor in racks if of such weight or bulk as to be liable to fall. If passengers insist on taking such articles into cars, same must be placed on the floor between the seats, or at the end of the car when space is available.

Flagging equipment should be kept in the rear vestibule of the rear car, and in baggage car or head vestibule of leading car.

910. Passengers must not be allowed to ride on the car steps or platforms, or in express or mail cars unless authorized.

When a train is in motion, vestibule doors and traps, and platform gates, must be closed except when approaching or leaving stations or when necessary to meet service requirements.

Open sufficient traps. Do not unload and load passengers at the same trap at large stations or where a large number of passengers are involved.

911. Unnecessary noises in or about occupied passenger cars at night should be prevented so far as possible, and careless switching or coupling of cars avoided.

912. Articles found in trains should be labeled with train number, car number, date and name of finder and left at designated points.

913. Conductors must not permit their train to be moved while passengers are getting on or off. Train employes must, so far as possible, prevent passengers from getting on or off while train is in motion, and in starting from a station they must not leave car platform until train has cleared the

station platform and should be in a position to observe and prevent, if possible, passengers boarding or leaving the train while it is in motion.

914. Gambling on trains is forbidden.

916. Train employes will note the condition of the cars in their trains and report to the superintendent any omission as to cleaning, ventilating, heating and providing the cars with water and ice.

917. Conductors must not give the signal to start at any station until they receive an "all right" signal from the trainman. This signal is given by holding the hand or lamp at arm's length as high as the shoulder, and must not be given if passengers are getting on or off the train.

918. In general, passenger train employes must be familiar with and observe existing instructions governing the heating and cooling of passenger trains, and when patrolling trains make sure that the proper temperature and illumination are maintained in all cars.

Be certain that the gates or doors at the head end of the head passenger carrying car and at the rear end of the rear passenger carrying car are drawn across and secured or closed.

Cabinets containing electric equipment must not be used for the storage of newspapers, fusees, torpedoes or similar equipment which may cause fire or personal injury.

919. In addition to standard uniform they must while on duty wear white shirt with white laundered collar, black four-in-hand tie and black shoes. They will be clean shaven, hair neatly trimmed and brushed, clean linen, uniform and cap in good con-

dition, shoes shined and in good repair. Hats must not be worn tilted. Sweaters and jackets must not be worn unless completely concealed by standard uniform. Time-tables or other lengthy or bulky articles will not be carried in outside pockets.

Personal appearance is extremely important. Carelessness in attire creates an unfavorable impression and may be accepted as characteristic of your work.

FREIGHT SERVICE.

920. Passengers or others are not allowed to ride on a freight train without proper authority; persons in charge of freight requiring personal care in transit must be authorized on the way-bill.

921. Cars must be inspected before loading to know they are in proper condition to receive the class of freight to be loaded.

922. Defective cars must not be handled in revenue trains by means of chains instead of couplers, or in association with other cars that are used in commercial service, unless such defective cars contain live stock or perishable freight.

If such car contains live stock or perishable freight, it may be taken to the first point where repairs can be made.

A damaged car which requires chaining for movement, and which does not contain live stock or perishable freight, may be taken to the nearest point where it can be set off, and report sent by wire from first open office.

923. Passenger equipment and wood flat cars must be placed on rear of train.

Cars occupied by workmen, also scale test cars, must be handled next ahead of caboose.

Helping engines must be placed ahead of passenger cars, wood flat cars, occupied workmen's cars and scale test cars.

When a car is handled at the rear of caboose in emergency, unless its air brakes are operative and connected through to the leading engine it must be coupled and chained to the caboose.

Cars of live stock should be hauled near the head end.

Trains handling cars of single open loads of poles, timber or pipe which extend above the sides of the car with or without idlers, and all double or triple loads with load resting on two or more cars, must be made up in one group on head or rear of trains, or in two groups, one on head end and one on rear; on head end, leading car not more than sixth from engine; on rear car, not more than sixth ahead of caboose (see Note) to permit continuous observation by train and engine crews. Such cars to be moved in trains authorized by the superintendent.

NOTE. — Restrictions as to position in train will not apply in territory between Fremont and Oak Point, N. Y.

Trains handling single open loads with lading below the top of sides of the car, and double or triple loads having either single or double overhang but with load resting all on one car, may move at normal permitted speed provided the dimensions are approved for clearance by the Engineer of Clearance and loading is approved by Mechanical Department inspectors.

924. Work trains working within yard limits must allow an arbitrary mileage of 6 miles per hour for each car on freight wheel report, for the time so engaged.

Work car miles on wheel report, for work extras when run to a certain point to work or when working within specified limits, actual mileage made while under train orders, and in addition an arbitrary mileage of 6 miles per hour for the time working at the point; or within the working limits named, should be allowed.

In computing arbitrary mileage, fractions representing less than one-half hour shall be disregarded and other fractions considered as one hour.

BULLETIN AND CIRCULAR BOARDS.

930. Bulletin and circular boards are located at stations designated by time-table. Separate boards are provided for each.

At places where these boards are located, yardmasters, station masters, agents, operators, engine house foremen or crew dispatchers, or other assigned employes are responsible for the prompt and proper posting of these bulletins on the boards under their jurisdiction.

931. Red bulletins and wire bulletins show only information affecting safety, or operation of trains; circulars show other information.

932. One red bulletin only shall be in effect and appear on bulletin boards; each issue will cancel the previous issue.

933. Wire bulletins are issued in emergencies only and placed upon red bulletin boards. Each wire bulletin shows the numbers of the previous wire bulletins in effect; all other wire bulletins must be removed from bulletin boards.

934. Circular notices remain on circular boards until notice for removal is received from the office issuing such notices. Removal notices are issued the first week day of each month.

935. Conductors, ticket collectors, train baggagemen, flagmen, trainmen, yard brakemen, enginemen, firemen and other employes concerned must, before starting each day's work, examine bulletin and circular boards at initial stations, also those at all stations on each trip when practicable.

PERSONAL INJURIES.

940. All cases of personal injury no matter how slight must be promptly reported by wire, on prescribed form, giving full name and address of the party injured, and the nature of the injury described in detail. The names and full addresses of all persons who witnessed the accident, or have any knowledge of same, whether passengers, employes or others, must be obtained.

In case of accident to employes, arrange, if possible, to obtain name of person injured, full address (town, street and number), the name of machine, tool or appliance involved, and part of body injured, (as in case of arms, legs, etc.), whether right or left, and the estimated length of time the injury will incapacitate the employe from duty.

941. Personal injury occurring on or around trains should also be covered by confirming report on the prescribed form from both the conductor and engineman; the other members of the crew to send in written statements. Conductor and engineman to instruct them accordingly, and if they have no knowledge of the accident, should so advise in a statement to superintendent.

942. Cars, engines or other property involved in personal injury must be inspected by an authorized inspector in the department controlling same, and report of inspection immediately made to the superintendent. All concerned must see that the proper inspector is notified.

Employes must thoroughly inspect appliances involved, and a special inspection must be made by car inspector in every case where there is the slightest possibility that equipment contributed in any way to the accident.

943. Cars involved in accidents causing personal injuries must be held until released by the superintendent. The superintendent must be advised promptly number and initials of cars.

If loaded with perishable freight or live stock, inspection and report will be made, but cars need not be held en route. If destined to a point on this line, card manifest must be endorsed "Hold empty at destination account of personal injury at ———— and advise superintendent." If destined to a foreign line, and inspection has not been made by car inspectors, request for such inspection at the junction point with the foreign line must be made by conductor upon arrival.

944. In case of accident, conductors may command the service of engines and employes of other trains in emergency. Information required on accident report form must be promptly reported by wire, and followed by a more detailed written report on prescribed forms. In reporting accidents by wire, particulars enough must be given to enable the superintendent to fully understand the situation, particularly when assistance or material is required.

945. In case of accident involving injury to persons, damage to property, or obstruction of track, or if the track is found impassable or unsafe from any cause, or if there is any unusual delay, report must be made to the superintendent by wire as soon as possible, giving information necessary for a clear understanding, as to assistance required. Prompt and efficient measures must be taken to prevent excitement and needless alarm, to repair damages, and to forward passengers and mail to destinations with the least possible delay. In the absence of a supervising officer, the conductor must take entire charge of all work necessary and of all employes who can be spared to render assistance. The train must first be protected and every precaution taken to prevent further accident.

946. In case of a fatality, the medical examiner for the town or district (or in New York State the coroner) must be notified. In the absence of the medical examiner, or of his inability to act, notice should be sent to the medical examiner for the next town. In a populous neighborhood, or near the home of the deceased, the body should be left with an employe at the place where the fatality occurred, and care taken not to unnecessarily touch or disturb the body, or any article on or near it, or

disturb its surroundings. In a desolate place where there is no one to take charge of the body, it should be removed to the next station and notice sent to the medical examiner for the town or district in which the death occurred. A description sufficient to guide the medical examiner to the place where the fatality occurred should be left at such station. If the body is carried out of the town or district where the fatality occurred, it should be returned to a station in such town or district upon request of the medical examiner.

947. In case of accident to a train involving injuries to passengers, the conductor must endeavor to obtain a full list of the names and addresses of all passengers, inquiring of each whether injured or not, writing down the answers. When it is not practicable to get the names of all passengers, he must at least get the names of those who were in the damaged cars.

MOTOR HAND CAR OPERATION.

DEFINITION.

Motor Hand Car.—A motor driven railway work or inspection car, numbered for identification, with or without trailer cars.

NOTE. — Where the word "car" appears in Rules 950 to 982 inc., it applies to motor hand cars.

NOTE. — Operators in charge of highway rail cars in "HR" series must not place these cars on the main track without authority of train dispatcher, and all operating rules applicable to the movement of motor hand cars will apply to movement of "HR" cars.

RULES.

950. Motor hand cars must be in charge of an authorized employe, designated in these rules as a motor hand car operator. They must not be run beyond their assigned limits, unless otherwise directed; nor in territory where the motor hand car operator is not qualified on the physical characteristics, unless authorized by the superintendent, and then only at restricted speed. Only employes in the discharge of their duties shall be permitted to ride upon these cars, unless otherwise directed.

951. When motor hand cars, other than those assigned to employes, are operated, they shall, unless otherwise arranged, be provided with a conductor and then operated only when approved by the superintendent.

952. Before commencing each day's work the motor hand car operator must ascertain from the train dispatcher directly or through the operator the correct time and through the operator if any regular trains are overdue.

953. For movements of motor hand cars on a main track, except as provided by Rules 954 and 684, prescribed form will be issued by authority and over the signature of the superintendent. Before this form is issued, the train dispatcher must, when necessary, first provide protection by train order for the movement against extra trains authorized to move in the territory affected. After this form has been transmitted, the employe receiving it must repeat it at once from the manifold copy to the train dispatcher or relaying operator. When the form has been repeated correctly, the response "OK" and the time will be given by the train dispatcher or relaying operator. The employe receiving this response will then write "OK" and the time on the form. When received by an operator, this form must be read by the motor hand car operator to the operator and in all cases to the occupants of the car before it is acted upon.

Should it become necessary to rescind Form 1433-b, train dispatchers will use following form: "Form 1433-b No———MHC———at——— is cancelled."

The motor hand car must be clear of the main track at the time specified on the form; failing to do so, it must be protected as prescribed by Rule 99. At points where prescribed authority to occupy the main track cannot be obtained, the motor hand car may proceed at restricted speed and on single or two or more tracks first be protected as prescribed by Rule 99 in both directions until prescribed authority to occupy the main track has been obtained. Unless otherwise directed, motor hand car movements on other than main tracks must proceed expecting to find such tracks occupied.

Manual block protection must be provided for motor hand cars in manual and automatic block signal system territory as follows:

MANUAL BLOCK SIGNAL SYSTEM TERRITORY.

When authorized to occupy the main track, manual block protection will be provided motor hand car movements in manual block system territory.

Before occupying a block at a closed block station or a non-block station, the motor hand car operator must obtain permission from operator in control of the block. The motor hand car operator must report to the operator in control of the block when the motor hand car is clear of the block.

A motor hand car must be clear of the block five minutes before a regular train is due to enter the block; failing to do so must protect as prescribed by Rule 99.

A motor hand car may be permitted to follow a preceding train or motor hand car into an occupied block when authorized by train dispatcher by a notation on Form 1433-b reading, "Block occupied by ————." Manual block signal system rules will apply to blocking of motor hand cars insofar as practicable in accordance with this rule.

AUTOMATIC BLOCK SIGNAL SYSTEM TERRITORY.

When a motor hand car is authorized to occupy the main track as prescribed by this rule, rear end protection must be arranged for by train dispatcher

and operators against following trains, also against opposing trains until a report is received from motor hand car operator that motor hand car is clear of the main track. (Rule 506b amplified accordingly.)

A motor hand car must be clear of the main track not less than 5 minutes before a regular train is due to leave the next station where an operator is on duty.

In case of failure of motor hand car operator to clear the main track at the time specified on Form 1433-b or fails to clear the main track five minutes before a following regular train is due to leave the next station in the rear where an operator is on duty, the train dispatcher may authorize the movement of a following train to the territory occupied by the motor hand car with a "19" train order reading: "Motor hand car———authorized to occupy No———track between———and——— has not reported clear No———or extra——— proceed at reduced speed between these points."

Motor hand cars will proceed at reduced speed where approach lighted signals do not indicate a clear track ahead, unless otherwise instructed. A motor hand car must not be permitted to enter a block occupied by a preceding train or motor hand car unless notified accordingly.

954. Unless authorized to occupy the main track as prescribed by Rule 953, the motor hand car operator must, before making movements within home and dwarf signal limits of interlocking, have a definite understanding with the operator in writing, when practicable, as to what moves are to be made and under his authorization and protection

cars may be moved as directed, being governed by fixed signal indications. When practicable, the motor hand car operator must report promptly to the operator when the motor hand car is clear of the track or the movement for which permission was granted has been completed.

955. Operators will promptly record and report to the train dispatcher the time of arrival and departure and direction of motor hand cars. Train dispatchers must enter this information on the train sheet.

956. Unless otherwise arranged, a stop must be made at each open office en route and permission received from the operator to proceed. The operator must confer with the train dispatcher before giving information to the motor hand car operator.

957. Unless otherwise provided, motor hand cars must be operated with the current of traffic, except as provided by Rule 954, and on single track must not make a reverse movement between the points designated in the prescribed form unless authorized by the train dispatcher or under protection as prescribed by Rule 99.

958. Motor hand cars must not be put in motion without the motor hand car operator in position to control its movement. Before starting, an inspection must be made to see that running gear and brake appliances are in good operating condition; that a sufficient supply of gas is in the tank and that car is properly lubricated. Brakes must be tested immediately after starting.

959. Motor hand cars must not exceed maximum speed indicated by metal plate attached to car, but in no case over 30 miles per hour, and when towing cars, 20 miles per hour.

960. Motor hand cars must proceed at restricted speed, not exceeding 10 miles per hour;

(a) When passing workmen on or near tracks.

(b) When passing station platforms or standing trains. (See Rule 961.)

(c) When moving through interlocking or within yard limits, and over switches and rigid frogs.

(d) When approaching railroad crossings at grade, drawbridges and derails.

(e) When moving over public or private crossings at grade protected by crossing watchmen or gates, and must not proceed until gates are lowered or protection provided.

(f) When moving over private crossings at grade not protected by crossing watchmen or gates, except as provided by Rules 965 and 966.

961. When a passenger, mail or express train is receiving or discharging traffic on the side toward a station, a motor hand car must not pass between it and the station at which traffic is being received or discharged unless proper safeguards are provided, or the movement is otherwise protected.

962. Motor hand cars must be stopped when a train movement is passing on an adjoining parallel track, and when practicable the occupants of car dismount and stand clear of tracks. The motor hand car operator must remain at side of car away from moving train.

963. Motor hand cars must not be run through the spring rail side of frogs or through self-guarded frogs. Occupants must dismount and push through or lift car over the frog.

NOTE. — Motor hand cars must not be run through spring switches. Switches must be operated manually.

964. Motor hand cars must not be attached to an engine or train; nor shall they be run closer than 1000 feet behind a moving train or engine or another motor hand car. They must not be stopped within 300 feet from a standing train or engine on the same track, unless otherwise arranged.

965. Motor hand cars must be stopped before reaching a public crossing at grade not protected by crossing watchman or gates, or a private crossing at grade where the view is obscured. A man must be sent ahead with stop signals to protect the movement of the motor hand car over the crossing. Highway traffic to be given preference, and vehicular traffic moving on the highway a reasonable distance from the crossing allowed to pass before car proceeds.

966. Motor hand cars occupied and operated by one employe must be stopped before reaching a public crossing at grade not protected by crossing watchman or gates, or a private crossing at grade where the view is obscured. After ascertaining that there is no moving highway traffic within a reasonable distance from the crossing, the car must be pushed by hand over the crossing. Stop signals must be used to warn moving highway traffic which may have come into view after the movement of the car over the crossing has started.

967. All crossings protected by manually operated gates or audible or flashing light signals or combined automatic gates and flashing light signals will be considered unprotected for motor hand car movements and must be protected and gates operated as required before moving over such crossing.

NOTE.—At crossings protected by manually operated gates and no crossing watchman on duty, motor hand car operator will operate gates.

968. Motor hand cars, unless insulated, must not be operated on tracks that are bonded. If insulation is defective, cars must not be used until repaired. To prevent interference with track circuits governing signal and cab signal systems, care must be exercised when cars are placed on, or removed from, the track, not to allow a front and rear wheel on the same side of the car to come in contact with opposite rail at the same time.

969. When motor hand cars are removed from the track, they must be placed not less than 7 feet from the nearest rail and properly secured and locked. They must not be placed upon public or private crossings at grade, except when necessary to allow trains to pass. Highway traffic must be protected while cars are so located. When clear of tracks, lights and hand signals must be extinguished or obscured so that they cannot be seen from approaching trains. When an unattended car is left standing on a main track, power must be shut off and car secured so as to prevent moving.

When an unattended car is left standing on other than a main track, one pair of wheels must be removed from the track; in automatic block signal system territory when left between derail and main

track switch the wheels must be placed upon a tie in such a way the axle or framework of the car will not come in contact with a rail.

970. To prevent bending axles when removing a motor hand car at a planked crossing or one equipped with flangeway guards, one pair of wheels must be set clear of rails before attempting to swing car around to clear the track.

971. When placing motor hand cars on the track, the employes must take positions facing the car, lifting one end at a time, placing the heavy end on track first. When removing car from track, reverse the above operations. Employes must not walk backwards when handling cars.

972. Unless otherwise arranged, motor hand cars must not be operated without a sufficient number of employes to remove it from the track, if an emergency necessitating prompt action should arise.

973. A constant lookout must be maintained by the occupants of motor hand cars for trains, men working on or near the track or any obstruction liable to cause derailment. When occupied by two or more men, one must be assigned to keep a lookout ahead and another to the rear, one of whom will act as flagman.

974. At night or during stormy or foggy weather, a white light must be displayed to the front and a red light to the rear of motor hand cars. Occupants or material must not be permitted to intercept the view of these signals.

975. When a motor hand car stops or is delayed under circumstances in which it may be overtaken by a following movement, Rule 99 must be observed. Torpedoes exploded or fusees displaced by

passage of motor hand cars must be promptly replaced. Torpedoes must not be run over if it can be avoided.

976. Hand thrown switches must not be thrown for trainmen. When necessary to throw such switches for motor hand cars it must be done under the supervision of the motor hand car operator, and when movement is completed the switch must immediately be restored to its proper position, locked and the points examined. (See Rule 513.)

977. While motor hand cars are in motion, occupants must remain seated and not permit their legs to hang over ends of car; nor get on or off, except when necessary to push car to start motor, which must be done from the rear, and only those pushing may get on after starting. Scuffling, changing positions or unnecessary conversations are prohibited.

978. Motor hand cars must not be operated unless equipped with safety railings and front, side and rear tool guards. The motor hand car operator must arrange for the proper placing of occupants, tools and material. Tools or material must be so placed as to avoid falling off or interfering with the occupants or operation of the car. Track jacks, tools or material must not be carried on the end in the direction in which car is moving.

979. The motor hand car operator must provide himself with a regulation mouth whistle to warn trespassers and employes of approach; it must not be used as a warning device at public or private crossings at grade or for any other purpose. Unauthorized equipment must not be used or applied or change made in mechanism of car without the approval of the chief engineer.

980. To stop a motor hand car, brakes should be applied gradually. Emergency application to be made only when absolutely necessary and after occupants of the car have been warned. In wet weather or when rails are slippery, greater distance is required to stop. This must be considered when applying brakes.

981. Pushing hand, trailer or push cars ahead of motor hand cars is prohibited, except that tower trailer cars may be pushed at a speed not to exceed 5 miles per hour for short distances when actually engaged in the performance of work. When necessary to tow cars, they must be coupled to trail behind with an approved type of coupler and the towing car must be equipped with a free running motor. Towed cars must not be loaded so as to intercept the view of the rear lookout man on the motor hand car. Except for tower trailer cars, one employe must be assigned to each towed car to operate brakes, when so equipped, and a system of visible or audible signals for applying or releasing brakes on towed cars must be had with the motor hand car operator. When two or more motor hand cars are coupled, power for movement must be supplied only by the leading car.

982. Motors of cars must not be started or permitted to run within any building. Filling gasoline tanks while motor is running is prohibited. Smoking or the use of matches, torches, lanterns or other open lights while inspecting motor hand cars or when gasoline tank is being filled or drained is prohibited. Gasoline in excess of the supply in fuel tank must not be carried, except in approved safety cans. When necessary to ship motor hand cars, gasoline tank and carburetor must be drained.

USE OF PORTABLE TELEPHONES.

990. Portable telephones must not be used in the electrified zones. Pole box telephones are permanently located along the line for telephone service in this territory.

991. Two different types are furnished, one a small set without a hand generator, the other a larger set with hand generator and crank.

992. The small set without hand generator is principally for use on train dispatching circuits where ringing is not necessary. To use this set on a message circuit, it is first necessary to connect with train dispatching circuit, ask train dispatcher, who is always on the circuit, to request switchboard operator to answer on the message circuit, and then transfer line pole to message circuit.

993. The larger set with hand generator and crank is for use on train dispatching or message circuits. On message circuits, ring one long to signal switchboard operator.

994. Connect either set to line wires by means of line pole. Such connections to be made not more than 3 feet on either side from crossarms that are marked D and M to indicate train dispatching and message circuits. To connect with train dispatching circuit, attach to the two wires, one each side of letter D. To connect with message circuit, attach to the two wires, one each side of the letter M. Do not attach line pole to any line wires except those where crossarms are marked D or M as desired results may not be obtained and damage to property and injury to persons may result.

Do not leave line pole connected when set is not in use.

995. To avoid interruption to conversations, first listen before speaking to train dispatcher or ringing switchboard operator. If parties are talking, except in emergency, wait until conversation is finished. In emergency, notify the parties talking and ask them to release the circuit. Speak directly into the transmitter.

996. Do not handle or place line pole where the pole or wires fastened to it which lead to the telephone set will come in contact with insulated (black covered) power wires which are in service on some sections of the railroad and located on the end pin and pin next to the end pin of signal crossarms. These power wires may be distinguished from other insulated signal wires by the special type of insulators to which they are attached. These insulators are of a different shape and color than any other insulators on the pole line.

RAILROAD RADIO GENERAL AND OPERATING RULES.

General.

The following rules and requirements cover use of railroad radio systems and govern employes using such systems:

Definition: A railroad radio communication system is one employing radio for the transmission of intelligence between moving equipment, between moving equipment and a fixed point, or between fixed points.

Radio communication systems are under the jurisdiction of the Federal Communications Commission. The railroad company and its employes are governed by the Federal Communications Commission Operating Rules. Violation is a federal offense for which severe penalties are provided.

In order to operate a radio transmitting set a railroad employe must read and study the following rules and pass an examination thereon. Such examination will be given by railroad examiners.

RADIO OPERATING RULES.

1000. All employes, except those specifically authorized to do so, are prohibited from making any adjustments to a railroad radio set. Employes so authorized must carry their FCC operator license or verification card when on duty. If it appears that a radio transmitter is not operating properly its use shall be discontinued and the superintendent or his representative notified as soon as possible.

1001. No employe shall knowingly transmit any false distress communication, any unnecessary, irrelevant or unidentified communication, nor utter any obscene, indecent or profane language via radio.

1002. No employe shall divulge or publish the existence, contents, purport, effect or meaning of any communication (distress communications excluded) except to the person for whom the communication is intended or to another employe of the railroad whose duties may require knowledge of the communication. The above applies either to communications received direct or to any that may be intercepted.

1003. Before transmitting, any employe operating a radio transmitting set shall listen a sufficient interval to be sure the circuit is not already in use, particularly for distress traffic.

1004. A distress call will be preceded by the word "Emergency" repeated three times. Such calls shall be used only to cover initial reports of derailments, storms, washouts, fires, obstructions to tracks, or other matters which would cause serious delay to traffic, damage to property, injury to employes or the traveling public, and shall contain as complete information thereon as possible. All employes shall give absolute priority to communications from another station in distress, and except in answering or aiding a station in distress shall refrain from sending any communications until there is assurance that no interference will result to the station in distress.

1005. The railroad company is required to answer an official notice of violation of the terms of the Communications Act of 1934, as amended, within three days from receipt of notice and any employe receiving inquiry concerning any violation shall answer such inquiry within 24 hours after receipt of notice.

1006. Any employe shall permit inspection of the radio equipment in his charge and all FCC documents pertaining thereto, by a duly accredited representative of the Federal Communications Commission at any reasonable time.

1007. Employes, except in yard operation, shall identify the radio station from which they are calling by prefacing their call with the railroad name, for example, "New Haven Railroad Caboose Train 92 calling Engine," "New Haven Railroad Caboose Train 92 calling Engine Train 89", or "New Haven Railroad Engine 547 calling Caboose 1402."

1008. In certain cases at crossings, junctions or paralleling tracks some interference may develop with another railroad. In such cases special care in making identification shall be used and the employes concerned shall cooperate in handling their business by alternating calls and being as brief as possible.

1009. If any communication from a station other than another railroad radio station interferes with railroad radio service the railroad employe will endeavor to ascertain the identity of such station and report the occurrence as soon as possible through authorized channels to the superintendent

or his representative, giving the exact time, nature of the communication and identity of the station, if possible.

Internationally, the word "MAYDAY" indicates a distress message, the word "PAN" an urgent message, and the word "SECURITY" a safety message. Railroad employes may hear such messages sent by aircraft or, in coastal areas, by boats. Railroad employes hearing such messages must report them immediately through authorized channels to the superintendent or his representative in addition to taking such appropriate action to relieve the distress as may be possible.

HOURS OF SERVICE LAW INSTRUCTIONS.

ENGINE AND TRAIN CREWS.

(1). A conductor, engineman, fireman or trainman shall not remain on duty longer than 16 hours in any 24-hour period.

(2). When such employe has been continuously on duty for 16 hours, he must be relieved and not required or permitted to again go on duty until he has had not less than 10 consecutive hours off duty.

(3). Such employe who has been on duty 16 hours in the aggregate (total) in any 24-hour period must not be required or permitted to continue or again go on duty without having had at least 8 consecutive hours off duty.

Note: An employe goes "on duty" at the time he begins to perform service or at which he is required to be in readiness to perform service, and goes "off duty" at the time he is relieved from service and from responsibility for performance of service.

Provided:

(4). "That the provisions of this Act shall not apply in any case of casualty, or unavoidable accident, or the act of God; nor where the delay was the result of a cause not known to the carrier or its officer or agent in charge of such employe at the time said employe left a terminal, and could not have been foreseen; Provided further, that the provisions of this Act shall not apply to the crews of wrecking or relief trains."

(5). The following causes and others of like nature must not be regarded as "casualties, un-

avoidable accidents," "acts of God," or "causes which could not have been foreseen:"

Engines slipping on sand.
Hot boxes.
Drawheads pulled out.
Broken draft gear.
Burst air hose.
Broken couplers or knuckles.
Broken train line.

(6). Delays to trains due to causes or conditions known to exist before such trains leave a terminal or relay point will not be accepted as excuses for extending the hours of service beyond the prescribed time. The following will not be accepted as excuses:

Side-tracking to give superior trains the right of way.

When trains are delayed by trains ahead, which in turn have been delayed by any of the causes given.

(7). In computing the hours of service, no delay caused by casualty, unforeseen or unavoidable accident occurring within the first 14 hours of service, will be considered as a reason for exceeding the limit of hours of service, unless such delay exceeds one hour.

(8). A casualty, or unforeseen or unavoidable accident, occurring after 14 hours on duty shall be considered as a reason for exceeding the hours of service for the time, and the time only, of the delay as prescribed by the law.

(9). The above shall, in addition, apply to trains directly affected by accidents to other trains; but in such cases only the actual delay due solely to the period of actual obstruction shall be considered.

(10). Train dispatchers must tie up or relieve a crew after the expiration of 14 hours on duty, at a convenient place where the train and engine may be properly taken care of before the sixteen (16) hours have expired.

(11). Due allowance must be made for the time the crew have been on duty before starting from their initial point, and the time ordinarily consumed in securing release after arrival at a terminal.

If an employe subject to the Hours of Service Laws, should receive instructions that would cause him to exceed the legal number of hours on duty, or to report for duty before having been off duty the time required by law, he must immediately call attention of the proper officer to the fact.

(12). Train dispatchers must, in directing the movement of a train, at all times consider the efficiency of the engine or cars in train, characteristics of the road, weather conditions, tonnage of the train or run made in the earlier part of the trip, and all things which might retard train movement.

(13). When the 16 hours of duty are not continuous, the period off duty must not be deducted, unless the employes have been notified in advance that they are given a definite period off duty with opportunity to get at least 2 hours rest. Such period may not be considered "off duty" unless there is opportunity to get at least two hours of rest unbroken by necessity of intermediate travel regardless of the means of transportation.

(14). When any member of a crew has been on duty 14 hours, the conductor and engineman must notify the superintendent by wire.

(15). When apparent that a trip cannot be completed within the sixteen hours, and no instructions are received, the conductor and engineman must sidetrack their train and relieve the entire crew from duty before their 16 hours have expired, making the necessary arrangements for the protection of their train, and care of the engine.

(16). They are authorized to call upon any employe who may be qualified to care for the engine until other arrangements can be made. If no such other qualified employe can be found, either the engineman or the fireman must remain in charge of the engine.

(17). Agents, yardmasters, baggage-masters, pumpmen and other employes must co-operate with train crews to insure their being relieved within the 16 hours, and to avoid violations of the Hours of Service Law.

(18). Agents, yardmasters and engine house foremen will be held responsible for carrying out instructions to relieving crews inside the time limit, and when trainmen and enginemen find themselves on short time on arrival at any station or yard, they must immediately take action to obtain proper relief to avoid violation of the law.

(19). If for any reason instructions cannot be obtained, conductors and enginemen must reduce trainload, or take such action necessary to insure reaching a terminal or relay point and obtaining relief before having been on duty 16 hours.

(20). Employes, deadheading on trains and not required to perform any service in connection with the movement of the train upon which they are deadheading, are not "on duty" under the law.

(21). Should a crew be on duty more than sixteen hours in a twenty-four hour period, the conductor and engineman must make out a special delay report on prescribed form, and forward same to the superintendent with time slips.

TRAIN DISPATCHERS AND OPERATORS.

(22). No operator, train dispatcher, or other employe who, by the use of the telegraph or telephone, dispatches, reports, transmits, receives, or delivers, orders pertaining to or affecting train movements, shall be required or permitted to be or remain on duty for a longer period than 9 hours in any 24-hour period in all towers, offices, places and stations, continuously operated day and night; nor for a longer period than 13 hours in all towers, offices, places and stations operated only during the daytime, except in case of emergency, when the employes named in this proviso may be permitted to be and remain on duty for 4 additional hours in a 24-hour period on not exceeding 3 days in any week.

(23). These provisions apply to employes in towers, offices, places and stations, and do not include train employes who, by the terms of the law, are permitted to be or remain on duty 16 hours consecutively or 16 hours in the aggregate in any 24-hour period and who may occasionally use telegraph or telephone instruments for the receipt or transmission of orders affecting the movement of trains.

(24). No operator employed in any office operated continuously night and day, must be allowed to do any work for the railroad in any capacity

after 9 hours on duty have expired; and no operator employed in other offices must be allowed to do any work for the railroad in any capacity after 13 hours on duty have expired, until after the required hours of rest.

(25). The phrase, "towers, offices, places and stations," is interpreted to mean particular and definite locations. The purpose of the law and of the proviso for 9 hours of service may not be avoided by erecting offices, stations, depots, or buildings in close proximity to each other and operation from one a part of the day while the other is closed, and vice versa.

(26). The operator's duty need not be continuous but he must not be considered off duty unless there has been an interruption of at least one hour.

(27). Operators employed at night and day stations or at daytime stations, may, in case of emergency, be required to work 4 additional hours on not exceeding three days in any week. Manifestly the emergency must be real.

(28). The service of operators is limited to an aggregate of nine (9) hours or thirteen (13) hours, as the case may be, in any 24-hour period. Therefore, an operator who has performed the full duty permitted by the law must not return to any work for the railroad until the balance of the 24-hour period has expired.

(29). If an employe receives instructions which will require him to exceed the hours of service, or to report for duty without the period of rest required, he must immediately notify the person who has given the instructions.

REGISTERING IN HOURS OF SERVICE BOOK.

The person making the first entry on a page should head and date the page.

Entry should be made at completion of day's work. It is not required to register when commencing a day's work after required rest period.

Trainmen whose run is not with same conductor, such as swing men, middlemen and ticket collectors, should register personally. This will apply to firemen called to cover part of a run, or with two or more enginemen.

On runs allowing a lay-off of two hours or more, separate entries should be made for each period on duty.

This book is for record of time on duty under the law and does not affect the pay of any employe.

A crew relieved on account of the 16-hour law must indicate on time slips, the time relieved, where and by whom.

A crew when put on rest at other than home terminal, must indicate on time slip the time relieved for rest and the time it reports back for duty.

AIR BRAKE AND SIGNAL SYSTEM TESTS.

A-1. Foremen and inspectors are jointly responsible with enginemen and trainmen for condition of air brake and signal equipment on motive power and cars to the extent that it is possible to detect defective equipment by required air tests.

A-2. Signal system on passenger equipment trains must be tested and known to be in a suitable condition for service before leaving initial terminal and at each point where cutout cock has been closed or signal hose parted.

A-3. All trains, also switching movements over main tracks from one yard to another, or when interchanging cars with foreign roads, must have air brakes on all cars in effective operating condition and in service, except in case of emergency, but at no time shall the number of operative air brakes in service be less than 85 per cent.

No. of cars in train	Maximum number of cars without effective air brakes allowed.
6 cars or less	None
7 cars to 13 cars, inclusive	1 car
14 cars to 19 cars, inclusive	2 cars
20 cars to 26 cars, inclusive	3 cars
27 cars to 33 cars, inclusive	4 cars
34 cars to 39 cars, inclusive	5 cars
40 cars to 46 cars, inclusive	6 cars
47 cars to 53 cars, inclusive	7 cars
54 cars to 59 cars, inclusive	8 cars
60 cars to 66 cars, inclusive	9 cars
67 cars to 73 cars, inclusive	10 cars
74 cars to 79 cars, inclusive	11 cars
80 cars to 86 cars, inclusive	12 cars
87 cars to 93 cars, inclusive	13 cars
94 cars to 99 cars, inclusive	14 cars
100 cars to 106 cars, inclusive	15 cars
107 cars to 113 cars, inclusive	16 cars
114 cars to 119 cars, inclusive	17 cars
120 cars to 126 cars, inclusive	18 cars
127 cars to 133 cars, inclusive	19 cars
134 cars to 139 cars, inclusive	20 cars
140 cars to 146 cars, inclusive	21 cars
147 cars to 153 cars, inclusive	22 cars
154 cars to 159 cars, inclusive	23 cars
160 cars to 166 cars, inclusive	24 cars
167 cars to 173 cars, inclusive	25 cars
174 cars to 179 cars, inclusive	26 cars
180 cars to 186 cars, inclusive	27 cars
187 cars to 193 cars, inclusive	28 cars
194 cars to 199 cars, inclusive	29 cars
200 cars to 206 cars, inclusive	30 cars

NOTE. — Each electric or Diesel-electric engine equals 1 car.

A-4. In case air brakes become inoperative, engineman or conductor must report to the superintendent, and ask for instructions.

A-5. Tests of the train air brake system must be made as prescribed by Rules A-6 to A-17 inclusive at initial terminals, and as prescribed by Rules A-30 to A-32 inclusive at other points where necessary, to insure that the condition of the brakes is in accordance with the requirements of Rule A-3. Conductors are responsible where car inspectors are not available.

A-6. Before making a terminal test the slack must be stretched and if test is made from a yard plant, slack must be held by hand brakes when practicable.

A-7. When making a terminal test or when dropping or picking up cars enroute, all air hose must be coupled and all angle cocks except the one on rear must be opened before turning air into cars.

A-8. Engineman must not under any circumstances move engine or cars or apply train air brakes after a terminal test is begun unless instructed by the foreman, inspector, conductor or trainman, and then only after employes authorizing the move have notified those working around or under cars and given them sufficient time to protect themselves.

A-9. Condensation must be blown from the pipe from which air is taken before connecting yard line or motive power to train.

Train air brake system must be charged to required air pressure, angle cocks, end cocks and cut-out cocks must be properly positioned, air hose must be properly coupled and must be in suitable

condition for service, and retaining valves and retaining valve pipes must be inspected and known to be in suitable condition for service, and if train is to be operated in electro-pneumatic brake operation, brake circuit cables must be properly connected. A careful examination must be made for leaks and necessary repairs made to reduce leakage to a minimum.

INITIAL TERMINAL AIR BRAKE TESTS.

An Initial Terminal is the terminal at which a train of unchanged consist is made up, or a point at which a railroad receives a train in interchange.

The term "standard pressure" as used in Rules A-6 to A-33, both inclusive, is the brake-system feed valve pressure at which it is intended that the train under test shall be operated during the trip for which it is being tested.

A-10. (a) After air brake system on a freight train is charged to within 10 pounds of standard air pressure for that train as indicated by an accurate gauge at rear end of train, and on a passenger train when charged to not less than 70 pounds, and upon receipt of proper request or signal to apply brakes for test, a 15-pound brake pipe service reduction must be made in automatic brake operation, then note the number of pounds of brake pipe leakage per minute as indicated by brake pipe gauge. Inspection of train brakes must be made to determine if brakes are applied on each car, that piston travel is correct, that brake rigging does not bind or foul, and that all parts of brake equipment are properly secured. When this inspection has been completed, release signal must be given and brakes released and each brake inspected to see that all have properly released.

(b) When a passenger train is to be operated in electro-pneumatic brake operation and after completion of test of brakes as prescribed by Rule A-10 (a), brake system must be recharged to not less than 90 pounds air pressure, and upon receipt of proper request or signal to apply brakes for test, a minimum 20-pound electro-pneumatic brake application must be made as indicated by brake cylinder gauge. Inspection of train brakes must then be made to determine if brakes are applied on each car. When this inspection has been completed, release signal must be given and brakes released and each brake inspected to see that all have properly released.

(c) The following tests will be made of the safety control application on electric motors and M.U. equipment:

ELECTRIC MOTORS.

Before leaving ready or storage tracks enginemen will test safety control application as follows: With brake system fully charged and brakes released, release controller handle or foot pedal and, after brake application starts, lap brake valve and note that brakes apply. Depress controller handle or foot pedal and release brakes in the usual manner.

NOTE.—It must be known that there is no leakage from controller handle reservoir and its related piping.

MU TRAINS.

When a train is ready for terminal train brake test:

Cars 4020 to 4109, 4200 to 4313, 4650 to 4661 and 2759 to 2767:

1. Apply hand brake on operating car.
2. Push brake button in and remove brake plug.

3. When signal to apply brakes is received, apply brakes. After brake pipe leakage is noted, increase brake pipe reduction to 25 pounds.

4. Set up master controller for normal operation.

5. When signal to release brakes is received —

6. Release master controller handle. Brakes should apply in electric emergency.

7. When emergency action is obtained, push brake button in and release brakes in the usual manner.

NOTE.—Brake valve handle must be left in lap position for 15 seconds before handle is moved to release position.

8. After train brake inspection is completed, set equipment for normal operation.

Cars 4400 to 4488, 4670 to 4676 and 5110 to 5113:

1. Apply hand brake on operating car.

2. Place control switch in "off" position.

3. When signal to apply brakes is received, apply brakes. After brake pipe leakage is noted, increase brake pipe reduction to 25 pounds.

4. When signal to release brakes is received, move control switch to control position. Brakes should apply in electric emergency.

5. When emergency action is obtained, move control switch to "off" position and release brakes in the usual manner.

NOTE.—Brake valve handle must be left in lap position for 15 seconds before handle is moved to release position.

6. After brake inspection is completed, set up equipment for normal operation.

(d) When the engine used to haul the train is provided with means for maintaining brake pipe pressure at a constant level during service application of the train brakes, tests of the train brakes shall be made with the maintaining feature in operation.

A-11. Soapsuds may be used when leaks cannot otherwise be located when weather conditions permit.

A-12. Brake pipe leakage must not exceed 5 pounds per minute.

If brake pipe leakage exceeds 5 pounds per minute during a terminal test, brakes shall be released and leaks repaired.

Brakes must not be reapplied until engineman has been notified by inspector or trainman that leaks have been repaired and train is ready for test.

A-13. (a) Piston travel of body-mounted brake cylinders which is less than 7 inches or more than 9 inches must be adjusted to nominally 8 inches.

(b) Minimum brake cylinder piston travel of truck-mounted brake cylinders must not be less than 4 inches to provide proper brake shoe clearance when brakes are released. Maximum piston travel must not exceed 5 inches.

(c) Piston travel of brake cylinders on freight cars equipped with load compensating brake must be adjusted to nominally 5 inches. Piston travel of brake cylinders on freight cars equipped with other than standard single capacity brake or load compensating brake must be adjusted as indicated on badge plate on car located in a conspicuous place near brake cylinder.

A-14. When test of air brakes is completed, the inspector or trainman who made the test will per-

sonally inform the engineman and conductor and advise them the number of cars in train and number having inoperative brakes.

A-15. Defects discovered during a standing test, that cannot be repaired promptly, must be reported to the foreman, inspector or conductor for necessary action, as prescribed by Rule A-22.

A-16. (a) When train air brake system is tested from a yard test plant, an engineer's brake valve or a suitable test device must be used to provide increase and reduction of brake pipe air pressure or electro-pneumatic brake application and release at the same or a slower rate as with engineer's brake valve and yard test plant must be connected at the same point in the train where the engine, from which air brakes are to be operated, is to be attached.

(b) When yard test plant is used, the train air brake system must be charged and tested as prescribed by Rules A-10 to A-17 inclusive, and when practicable should be kept charged until road engine is coupled to train, after which an automatic brake application and release test of air brakes on rear car must be made. If train is to be operated in electro-pneumatic brake operation, this test must also be made in electro-pneumatic brake operation before proceeding.

(c) If brake valve or test device other than as specified in Rule A-16 (a) is used on yard test plant, or if after testing the brakes as prescribed in Rule A-16 (b) the train is not kept charged until road engine is attached, the brakes must be tested as prescribed by Rule A-10 except that portion pertaining to piston travel and brake rigging, and as prescribed by Rule A-16 (b) if train is to be operated in electro-pneumatic brake operation.

A-17. Before adjusting piston travel or working on brake rigging, cutout cock in brake pipe branch pipe must be closed and air reservoirs must be drained. When cutout cocks are provided in brake cylinder pipes, these cutout cocks only must be closed and air reservoirs need not be drained.

A-18. When cars are to be added to or switched out of a passenger equipment train, brake pipe pressure must be reduced 15 lbs. from engine hauling train before air hose are coupled or uncoupled. The air brake system of the added cars must be charged to standard pressure. When cars are added to the rear, and before angle cock, end cock or cut-out cock is closed, engineman on switching engine must make a 15 lb. brake pipe reduction and air brakes left applied on cars when switching engine is detached.

When cars with air brake system charged and brakes controlled by switching engines are switched out of or added to rear end of a freight train, air brakes on cars recoupled by switching engine must be applied. Angle and end cocks must not be opened or closed until the engineman on switching engine has applied the brakes. Conductor, inspector or trainman must know that air brakes on added or recoupled cars are released from the engine which is to haul train.

A-19. When a helper engine is to be added to the head end of a train, the engineman of the engine hauling train shall make a brake pipe reduction of 15 lbs. and close double-heading cock before the helper engine is attached. After leading engine is attached, the engineman of the leading engine will make a brake pipe reduction of 15 lbs. before air hose are coupled. After air hose are coupled and

angle, end and cutout cocks are opened, the engineman of leading engine shall make an additional brake pipe reduction of 10 lbs., place brake valve in lap position and note brake pipe leakage. Before proceeding, test must be made as prescribed by Rules A-30 or A-31.

Before a leading engine is detached from the head end of a train, the engineman of that engine shall make a brake pipe reduction of 15 lbs. After leading engine is detached, the engineman on the engine which is to haul train shall make a brake pipe reduction of 15 lbs., then open double-heading cock, then make an additional brake pipe reduction if necessary to reduce brake pipe pressure 25 lbs. Note brake pipe leakage. Before proceeding, test must be made as prescribed by Rules A-30 or A-31.

Before air hose are coupled between a helper engine and car on rear end of a train, the engineman on that engine must make a 20 lb. reduction of brake pipe pressure and close double-heading cock. The air brakes on this engine must be released from the engine hauling the train.

After air hose are coupled, angle and end cocks must be opened slowly to prevent undesired quick action.

A-20. When defects develop on a car enroute making it impossible to connect air pressure to adjacent car, the train signal hose may be used on passenger cars if the air pressure cannot be otherwise connected, until a point is reached where hose can be properly connected. Conductor must report such cases to the car foreman.

NOTE. — If the trouble is caused by a ruptured air hose and it is possible to change the air hose without any serious delay, this change should be made to correct the trouble instead of crossing the hose as stated above.

A-21. One or more cars with air brakes inoperative, except when control valve is operating on the car with cutout cock in brake cylinder pipe closed, must not be handled next to engine or adjoining each other from or beyond a point where a switch may be made to place elsewhere in train.

A-22. A car which has air brakes inoperative, regardless of defects which make it inoperative, must not be handled in a train from or beyond a point where facilities are provided for repairing air brakes, except on the rear of train behind cars having operative air brakes and, in the case of freight trains, ahead of caboose (caboose brake must be cut out), and brake pipe pressure must be used to furnish air for caboose.

Oak Point, New Haven, Maybrook, Hartford, Northup Ave. and A St. are designated as air brake repair points.

A-23. If air brakes fail to release and a blow is observed at exhaust port of triple or control valve, the cutout cock in brake pipe branch pipe must be closed and the valve tapped lightly near the exhaust. After discharge of air ceases, the cutout cock should be opened quickly.

If blow continues and brakes fail to release, close cutout cock in brake pipe branch pipe and bleed reservoirs; if impossible to release brake under the above procedure, loosen a fitting in brake cylinder pipe. Engineman must be notified when one or more brakes are cut out.

A-24. If stuck air brakes develop enroute, signal must be given to release air brakes. If brakes cannot be released after making a 25 lb. reduction, train must be stopped and necessary action taken before proceeding.

A-25. If a leak develops in hose couplings, they may be adjusted to prevent leakage and then tested by moving laterally several times. If the leak again develops, apply new gaskets.

A-26. If air brake defects develop or if air brakes are cut out on a car or cars enroute, conductor must apply defective air brake card on each defective car and be governed by the instructions thereon.

A-27. To locate a triple or control valve which has caused undesired quick action of air brakes, those making the inspection should inspect an equal number of cars and should be located along the train accordingly. With air brake system fully charged, a full service application should be made and the direction of the quick action noted. If it originates near the head end of train (which will be indicated by the direction in which the quick action travels), an angle cock should be closed at the rear of the originating point and the brake system fully recharged, when a brake pipe reduction of 5 lbs. should be made in case of triple or control valves, and 8 lbs. in case of "PC" valves.

Those making the inspection should promptly observe brakes which do not apply. If all brakes apply, release, recharge and repeat the test. In the event of an air brake failing to apply, a further service reduction of 10 to 15 lbs. shall be made. If, during this reduction, the air brakes which did not apply with the previous reduction apply suddenly, a defective triple or control valve is indicated.

A-28. Defects in air brakes and signal equipment must be reported in writing to the car foreman by the conductor at the terminating point of train. Foreman must test equipment from incoming engine when practicable.

A-29. Conductor's valve, platform valve or caboose valve may be used to stop a train in an emergency only. In making an emergency stop the conductor's valve, platform valve or caboose valve should be fully opened quickly and left opened until train stops. After train stops, conductor's valve, platform valve or caboose valve if used must be closed by hand.

In making a service stop, the platform valve or caboose valve should be opened gradually to prevent quick action of brakes and left opened until train stops.

Conductor's valve, platform valve or caboose valve should not be opened when the brakes are being applied from the engine unless signal is received from engineman or in an emergency.

In freight service the caboose valve should be used in stopping a train, and employes will be governed by instructions posted in caboose for its operation.

A-30. Before engine is detached or angle or end cocks are closed on a passenger train operated in either automatic or electro-pneumatic brake operation, except when closing angle or end cocks for cutting off one or more cars from the rear end of train, automatic air brake must be applied. After recoupling, brake system must be recharged to required air pressure, and before proceeding and upon receipt of proper request or signal, application and release test of brakes on rear car must be made from engine in automatic brake operation. If train is to be operated in electro-pneumatic brake operation, this test must also be made in electro-pneumatic brake operation before proceeding. Inspector or trainman must determine if brakes on rear car of train properly apply and release.

A-31. Before engine is detached or angle or end cocks are closed on a freight train, brakes must be applied with not less than a 20-lb. brake pipe reduction. After recoupling and angle and end cocks are opened, it must be known that brake pipe air pressure is being properly restored as indicated by the caboose gauge and that brakes on rear car are released. In the absence of a caboose gauge, air brake test must be made as prescribed by that portion of Rule A-30 pertaining to automatic brake operation.

A-32. (a) At a point or terminal other than initial terminal, where engine or engine crew or entire train crew is changed, except as provided in Rule A-32 (b), tests of the train brake system must be made as follows: After the brake system on a freight train is charged to not less than 10 lbs. below the standard pressure for that train as indicated at rear end of train, and on a passenger equipment train when charged to at least 70 lbs., a 15 lb. brake pipe service reduction must be made upon receipt of proper request or signal to apply brakes for test, and brake pipe leakage noted as indicated by the brake pipe gauge, after which the reduction must be increased to 25 lbs. Then an examination of the train brakes must be made to determine that brakes are applied in service application on each car. When this examination has been completed, proper release signal must be given and it must be ascertained that all brakes have released properly.

When these tests have been completed, tests of the electro-pneumatic train brake system when used shall be made as follows: After the brake system is charged to not less than 90 lbs. and upon proper request or signal, a minimum 20 lb. electro-pneumatic brake application, as indicated by brake

cylinder gauge, must be made and brakes examined to determine that brakes are applied on each car. When this examination has been completed, proper release signal must be given and it must be ascertained that brakes have released properly.

(b) At points, other than initial terminals, where engine crew or entire train crew or both are changed on a passenger equipment train, and consist including engine remains intact except for cutting off one or more cars from rear of train, before proceeding test must be made as prescribed by Rule A-30.

(c) At points, other than initial terminals, where engine crew or entire train crew or both are changed on a freight train and consist including engine remains intact, before proceeding tests must be made as prescribed by Rule A-31.

A-33. When one or more cars are added to a train at any point subsequent to a terminal test of train air brakes, and after such cars are placed in positions where they are to be handled in train, test of air brakes on these cars must be made as prescribed by Rule A-10 (a). Before proceeding, test must also be made as prescribed by Rule A-30 for passenger trains and Rule A-31 for freight trains.

A-34. When engine or engine crew has been changed, angle or end cocks have been closed except for cutting off one or more cars from the rear end of train, or electro-pneumatic brake circuit cables between power units and/or cars have been disconnected, running test of train air brakes on passenger train must be made, as soon as speed of train permits; by use of automatic brake if operating in automatic brake operation or by use of electro-pneumatic brake if operating in electro-pneumatic brake operation. Power must not be shut off unless

required and running test must be made by applying train air brakes with sufficient force to ascertain whether or not brakes are operating properly. If air brakes do not properly operate, signal to apply brakes must be given, train must be stopped, cause of failure ascertained and corrected and running test repeated.

A-35. The automatic air brake must not be depended upon to hold an engine, cars or train, when standing on a grade, whether engine is attached or detached from cars or train. When required, a sufficient number of hand brakes must be applied to hold train, before air brakes are released. When ready to start, hand brakes must not be released until it is known that the air brake system is fully charged.

A-36. When a train stops on an ascending grade where the slack is liable to run out, hand brakes must be applied on rear car at the time train stops, unless otherwise provided.

A-37. Before pushing cars upon main track when movement is to be controlled from leading car, trainman will, when practicable, give communicating signal 16 (e) and open leading platform valve or back-up hose cock and observe that brakes on leading car apply and release.

Engineman will observe that brake pipe pressure reduces and that engine brakes apply and release and acknowledge as prescribed by Rule 12 (f).

Brake valves must be carried in running position, and, when possible, two trainmen must ride on leading platform, one must keep his hand on platform valve or back-up hose cock while cars are in motion.

On work or wire trains when facilities for application of air brakes are located inside and adjoining window used for observation, movement may be controlled from that point.

A-38. At points where inspectors are employed to make a general inspection of trains upon arrival at terminals, visual inspection must be made of retaining valves and retaining valve pipes, release valves and rods, brake rigging, safety supports, hand brakes, hose and position of angle and end cocks and make necessary repairs or mark for repair tracks any cars to which yard repairs cannot be promptly made.

A-39. Freight trains arriving at terminals where facilities are available, and at which special instructions provide for immediate brake inspection and repairs, shall be left with air brakes fully applied. Inspection of brakes and needed repairs must be made as soon thereafter as practicable.

A-40. Conductors must inform enginemen when handling of train is not satisfactory and report such cases to the superintendent.

A-41. To give communicating signals, signal cord should be pulled quickly and held 1 second for each blast on trains of 10 cars or less and 2 seconds for over 10 cars. Allow 2 seconds between each blast for trains of 7 cars or less, 4 seconds for 8 to 12 cars and 5 seconds for trains of more than 12 cars.

A-42. If a car discharge valve becomes defective in service it must be cut out and the conductor notified. If necessary for train to proceed with the train air signal inoperative, train and engine crews must be notified.

A-43. Smooth handling of trains is essential to good service, and while time is an important factor, smoothness of operations must not be sacrificed for the small period of time that can be saved by improper starting, stopping and switching.

A-44. Ample time must be allowed to properly inspect and test air brakes and place them in proper working order before leaving terminal or points enroute.

CONNECTICUT

The following order issued by the Connecticut Public Utilities Commission dated April 13, 1955, must be complied with:

ORDERED (1). That, for the purpose of increasing the safety of employees engaged in the operation of trains or the movement of freight cars on all railroads in the State of Connecticut, all railroad companies operating in this State shall cease and desist from requiring, permitting, or allowing and by proper rule shall forbid any train employee or other employee from getting upon, riding upon, or working upon the top or roof of any freight car, caboose or electric or diesel locomotive except in cases of emergency; provided however, that this rule shall not apply to yards, industrial sidings, team tracks, house tracks or passing sidings or to main lines when switching operations are performed.

ORDERED (2). That for the purpose of increasing the safety of employees engaged in the operation of trains or the movements of freight cars on all railroads in the State of Connecticut, all railroad companies operating in this State shall cease and desist from requiring, permitting, or allowing and by proper rule shall forbid any train employee or other employee from standing between two main line tracks upon the passing of another train on an adjacent main line track.

ORDERED (3). That all railroad companies operating in this State shall put in force rules and regulations for the goverment of its train, yard, and other employees which will make the provisions of

this Order continuously effective and that a notice embodying the requirements of this Order and showing the entry thereof duly signed by a proper official or officials of said companies shall be kept posted in every caboose used in freight service and every locomotive used in freight or passenger service and in every engine house used in freight or passenger service on their systems within the State of Connecticut.

RHODE ISLAND

The following order issued by the Rhode Island Public Utilities Commission dated November 14, 1955, must be complied with:

ORDERED (1). That, for the purpose of increasing the safety of employes engaged in the operation of trains or the movement of freight cars on all railroads in the State of Rhode Island, all railroad companies operating in this State shall cease and desist from requiring, permitting, or allowing and by proper rule shall forbid any train employe or other employe from getting upon, riding upon, or working upon the top or roof of any freight car, caboose or Diesel locomotive except in cases of emergency; provided, however, that this rule shall not apply to yards, industrial sidings, team tracks, house tracks or passing sidings or to main lines when switching operations are performed.

ORDERED (2). That for the purpose of increasing the safety of employes engaged in the operation of trains or the movements of freight cars on all railroads in the State of Rhode Island, all railroad companies operating in this State shall cease and desist from requiring, permitting, or allow-

ing and by proper rule shall forbid any train employe or other employe from standing between two main line tracks upon the passing of another train on an adjacent main line track.

ORDERED (3). That all railroad companies operating in this State shall put in force rules and regulations for the government of its train, yard and other employes which will make the provisions of this Order continuously effective and that a notice embodying the requirements of this Order and showing the entry thereof duly signed by a proper official or officials of said companies shall be kept posted in every caboose used in freight service and every locomotive used in freight or passenger service and in every engine house used in freight or passenger service on their systems within the State of Rhode Island.

MASSACHUSETTS

The Department of Public Utilities of Massachusetts issued Order 10527-U dated April 17, 1953, reading as follows: "Ordered: That every railroad corporation erect and maintain bridge guards at the approach to every bridge or other structure, any portion of which crosses the railroad at a height less than 22 feet above the track, except at such locations where employes are prohibited from riding on top of cars."

Pursuant to the above order, employes are prohibited from riding the top of moving cars, cabooses, locomotives, and other equipment in the State of Massachusetts, except within yard limits designated by time-table where bridge guards are in service.

The following order issued by the Massachusetts Department of Public Utilities dated May 13, 1953, must be complied with:

ORDERED: That every railroad corporation shall carry upon each engine or rail motor car operated by it and in a car of each passenger train and in the caboose of each freight train operated by it at least one first-aid package containing:

(1) Three aseptic gauze pads for large wounds, 3″ x 3″ made of 16 thicknesses of No. 1A gauze, with a gauze bandage 2″ wide and 60 inches long attached for fastening pad to wound, and with the pad sewed to the middle of the bandage.

(2) Three aseptic gauze pads for small wounds, 2″ x 2″ made of 12 thicknesses of No. 1A gauze, with a gauze bandage 1″ x 18″ long attached for fastening pad to wound, and with the pad sewed to the middle of the bandage.

(Said gauze pads and bandages to be contained in individual glassine envelopes, those containing small dressings to be marked "For Small Wounds" and those containing large dressings to be marked "For Large Wounds.")

The carrying of said packages by the railroad employee in charge of the engine or rail motor car and by the conductor in charge of the passenger or freight train shall satisfy the requirements of this order.